

Chapter VII

Financial Analysis

The Federal Highway Administration, in Federal regulation 23 CFR 450.322, defines what must be included in the financial analysis section of the LRTP. The regulation states that the LRTP must:

“Include a financial plan that demonstrates the consistency of proposed transportation investments with already available and projected sources of revenue. The financial plan shall compare the estimated revenue from existing and proposed funding sources that can reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system over the period of the plan. The estimated revenue by existing revenue source (local, State, Federal and private) available for transportation projects shall be determined and any shortfalls identified. Proposed new revenues and/or revenue sources to cover shortfalls shall be identified, including strategies for ensuring their availability for proposed investments. Existing and proposed revenues shall cover all forecasted capital, operating and maintenance costs. All cost and revenue projections shall be based on the data reflecting the existing situation and historical trends.”

This chapter reports costs for all projects contained in the LRTP and compares them to projected revenues anticipated to be available through the year 2026. Costs and revenues for bicycle and pedestrian projects and programs are not included as the bicycle and pedestrian element is under development.

This financial analysis is done in two sections: Non-Transit and Transit. Within each of these two sections capital and operations and maintenance costs and revenues are identified by funding source and by the entity that programs the funds. Lastly, a summary section is provided which demonstrates fiscal constraint of the long range plan projects.

The information on revenues and expenditures contained in this chapter were provided by TDOT, MDOT, the MPO, local jurisdictions and MATA. The projections presented here are estimates and are subject to change over time, which is an inherent limitation of a plan that forecasts costs and revenues over a twenty-three year period.

All costs and revenues in this document are in constant dollars. There is no adjustment for inflation.

This chapter is intended to demonstrate the fiscal viability of this plan. There are a series of budget tables within this chapter which are important to this analysis. These budget tables include:

Non-Transit

- **Table 26** – Total Estimated Non-Transit Capital Costs
- **Table 30** – Existing System & Projected Operation & Maintenance (O & M) (Non-Transit) Costs
- **Table 40** – Tennessee and Mississippi Capital Revenue
- **Table 41** – Existing System & Projected O & M Revenue

Tables 42 & 43 provide a comparison of these costs versus revenue for the Non-Transit portion of this plan for both capital and operation and maintenance. As can be seen in these two tables, there is a sizable un-programmed balance of non-transit funds available.

Transit

- **Table 44** – Existing System & Projected Transit Capital Costs
- **Table 45** – Existing System & Projected Transit O & M Costs
- **Table 46** – Total MPO Programmed & Projected Capital Revenue
- **Table 47** – Total MPO Programmed & Projected O & M Revenue

Table 48 provides a comparison of cost versus revenues for the Transit portion of this plan for both capital and operation and maintenance.

Finally, **Table 49** which is located in the final section of this chapter, demonstrates fiscal constraint of the long range plan proposed projects (**Appendix N**, 2004-2026 Fiscally Constrained Plan-All Projects (by funding type) with the exception of the North Rail Corridor.

A. NON-TRANSIT

The non-transit cost and revenue analysis is divided into three sections:

- Non-Transit Costs
- Non-Transit Revenue
- Costs Versus Revenue Analysis

Costs and revenues are divided into capital and operations and maintenance sections.

1. Non-Transit Costs

Non-Transit Capital Costs

Cost estimates for the capital projects in the LRTP were determined and reported by officials of the local jurisdictions. **Table 26** below groups the LRTP capital costs by state, funding source, and entity responsible for programming funds for that project. Detailed capital project costs are found in **Appendix N**, 2004-2026 Fiscally Constrained Plan-All Projects (by funding type).

Table 26
Total Estimated Non-Transit Capital Costs 2004 - 2026
Long Range Transportation Plan

TENNESSEE COSTS				
2004-2026 by Horizon Year				
	TOTAL	TOTAL	TOTAL	TOTAL
	2004-2006	2007-2016	2017-2026	2004-2026
Programmed by State of TN				
IM	\$ 104,500,000	\$ 272,500,000	\$ 3,969,624	\$ 380,969,624
NHS	\$ 42,700,000	\$ 48,225,040	\$ 886,830	\$ 91,811,870
NCPD	\$ 60,000,000	\$ 90,000,000	\$ 90,000,000	\$ 240,000,000
SSTP	\$ 117,800,000	\$ 320,799,000	\$ 188,584,625	\$ 627,183,625
CMAQ (State)	\$ 1,100,000	\$ 30,000,000	\$ 30,000,000	\$ 61,100,000
BRR-S	\$ 60,000,000	\$ 32,000,000	\$ -	\$ 92,000,000
CESA*	\$ 3,000,000	\$ 19,500,000	\$ -	\$ 22,500,000
Subtotal	\$ 389,100,000	\$ 813,024,040	\$ 313,441,079	\$ 1,515,565,119
Programmed by MPO				
CMAQ (Local)	\$ 30,670,000	\$ 36,000,000	\$ 35,371,600	\$ 102,041,600
LSTP	\$ 98,043,500	\$ 133,317,676	\$ 133,750,000	\$ 365,111,176
ENHANCEMENT	\$ 9,773,925	\$ 3,480,431	\$ -	\$ 13,254,356
Subtotal	\$ 138,487,425	\$ 172,798,107	\$ 169,121,600	\$ 480,407,132
Programmed by Local Jurisdiction				
LOCAL (Shelby)	\$ 20,638,801	\$ 388,012,090	\$ 424,268,463	\$ 832,919,354
LOCAL (Fayette)	\$ -	\$ 11,879,387	\$ 3,324,000	\$ 15,203,387
TOTAL	\$ 548,226,226	\$ 1,385,713,624	\$ 910,155,142	\$ 2,844,094,992
*CESA (Congressional Earmark Special Appropriation)				
MISSISSIPPI COSTS				
2004-2026 by Horizon Year				
	TOTAL	TOTAL	TOTAL	TOTAL
	2004-2006	2007-2016	2017-2026	2004-2026
Programmed by State of MS				
NHS*	\$ 1,686,600	\$ 173,014,262	\$ 166,449,080	\$ 341,149,942
MSSTP	\$ 5,152,333	\$ 24,014,873	\$ 45,375,898	\$ 74,543,104
STATE CONSTRUCTION FUNDS	\$ 26,608,333	\$ -	\$ -	\$ 26,608,333
Subtotal	\$ 33,447,266	\$ 197,029,135	\$ 211,824,978	\$ 442,301,379
Programmed by MPO				
LSTP	\$ 2,588,000	\$ 13,557,901	\$ 11,926,785	\$ 28,072,686
ENHANCEMENT	\$ -	\$ -	\$ -	\$ -
Subtotal	\$ 2,588,000	\$ 13,557,901	\$ 11,926,785	\$ 28,072,686
Programmed by Local Jurisdiction				
LOCAL	\$ 10,227,863	\$ 126,704,181	\$ 92,883,502	\$ 229,815,546
TOTAL	\$ 46,263,129	\$ 337,291,217	\$ 316,635,265	\$ 700,189,611

*The majority of the NHS costs in 2007-2016 and 2017-2026 are associated with I-69.

Non-Transit Operations and Maintenance Costs

Cost estimates for operating and maintaining the existing transportation system were obtained from each jurisdiction and carried out to 2026. Cost estimates for the future transportation system were obtained by analyzing the following factors:

- Total number of lane miles currently maintained by each jurisdiction
- Each jurisdiction's costs for maintaining their existing transportation system
- Total number of lane miles to be maintained by each jurisdiction in 2026
- The same level of service would be maintained in the future relative to maintenance and operation of the transportation network.

Operating and maintenance (O & M) costs were evaluated looking at the total number of lane miles currently maintained by each jurisdiction. Given that additional lane miles and roadway improvements are to be added throughout the plan horizon, the proposed transportation improvement projects from the fiscally constrained plan were used as the 2026 transportation system.

Table 27 reflects the existing number of lane miles maintained in the MPO area by jurisdiction. A current dollar-per-lane-mile amount for O & M (See **Table 28**) was obtained by dividing a jurisdiction's yearly costs of maintenance by the current number of lane miles maintained. That dollar figure was then multiplied by the lane miles to be maintained in 2026 (**Table 29**).

Example:

Arlington maintains 101 lane miles currently.
They will maintain 194 lane miles in 2026.

Arlington currently spends \$350,000 annually on O & M.

Current dollar-per-mile: $\$350,000 \text{ per year} / 101 \text{ miles} = \mathbf{\$3,465/\text{mile}}$

2026 total cost: $194 \text{ miles} \times \$3,465 = \mathbf{\$672,210/\text{year}}$

The horizon year totals in **Table 30** were arrived at by applying a straight line projection to each jurisdiction's total O & M costs for the existing system (shown in **Table 28**) out to 2026. The State of Tennessee and the State of Mississippi provided their O & M costs by horizon year.

Table 27
Collectors and Arterials Maintained by Local
Jurisdictions

Jurisdiction	Existing Lane Miles Maintained	2026 Lane Miles
Shelby County	783	2,004
Arlington	101	194
Bartlett	184	267
Collierville	111	260
Germantown	127	185
Lakeland	77	143
Memphis	3,043	3,527
Millington	88	154
Total	4,514	6,734
Fayette County	101	161
Gallaway	27	45
Piperton	22	35
Total	150	241
DeSoto County	663	1,265
Hernando	9	18
Horn Lake	28	53
Olive Branch	120	229
Southaven	101	193
Total	921	1,758
Total MPO Area	5,585	8,733

Source: Road Index Network, January 16, 2004

Table 28

EXISTING SYSTEM OPERATIONS AND MAINTENANCE COSTS (Non-Transit)

		Other Operations and Maintenance Costs						
Jurisdiction	Paving	Signs & Painting	ROW Maintenance	Traffic Signal Maintenance	Surveillance and Inspection	Street Lighting	Other*	Total
Shelby County	\$ 1,500,000	\$ 700,000	\$ 410,000	\$ 10,000	\$ 400,000			\$ 3,020,000
Arlington	\$ 150,000						\$ 200,000	\$ 350,000
Bartlett	\$ 875,000	\$ 85,205	\$ 454,824	\$ 44,000	\$ 618,764	\$ 670,000	\$ 175,000	\$ 2,922,793
Collierville	\$ 632,777	\$ 14,000	\$ 15,200	\$ 10,000	\$ 185,500	\$ 745,000		\$ 1,602,477
Germantown	\$ 600,000	\$ 75,000	\$ 200,000	\$ 14,000	\$ 90,000	\$ 534,000		\$ 1,513,000
Lakeland	\$ 155,000						\$ 95,000	\$ 250,000
Memphis	\$ 9,000,000	\$ 2,400,000	\$ 3,000,000	\$ 3,900,000	\$ 1,275,000			\$ 19,575,000
Millington	\$ 43,000					\$ 150,000	\$ 58,300	\$ 251,300
TOTAL	\$ 12,955,777	\$ 3,274,205	\$ 4,080,024	\$ 3,978,000	\$ 2,569,264	\$ 2,099,000	\$ 528,300	\$ 29,484,570
Fayette County	\$ 86,000						\$ 35,000	\$ 121,000
Gallaway	\$ 16,816						\$ 8,408	\$ 25,224
Piperton	\$ 10,000						\$ 5,000	\$ 15,000
TOTAL	\$ 112,816	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 48,408	\$ 161,224
DeSoto County	\$ 300,000	\$ 25,000	\$ 100,000	\$ 50,000	\$ 275,000			\$ 750,000
Hernando	\$ 550,000					\$ 225,000	\$ 28,050	\$ 803,050
Horn Lake	\$ 400,000	\$ 2,500	\$ 6,500			\$ 32,000		\$ 441,000
Olive Branch	\$ 103,000						\$ 105,000	\$ 208,000
Southaven	\$ 479,524			\$ 36,129			\$ 447,074	\$ 962,727
TOTAL	\$ 1,832,524	\$ 27,500	\$ 106,500	\$ 86,129	\$ 275,000	\$ 257,000	\$ 580,124	\$ 3,164,777
TOTAL MPO AREA	\$ 14,901,117	\$ 3,301,705	\$ 4,186,524	\$ 4,064,129	\$ 2,844,264	\$ 2,356,000	\$ 1,156,832	\$ 32,810,571

*Source: Local Jurisdictions

*Other includes transportation expenditures such as minor sidewalk and intersection improvements.

Table 29

EXISTING SYSTEM AND PROJECTED O & M ANNUAL COSTS (Non-Transit)

Jurisdiction	Current Lane Miles Maintained	Current O & M Expenses	Current Cost Per Mile	2026 Lane Miles Maintained	2026 O & M Expenses
Shelby County	783	\$ 3,020,000	\$ 3,857	2,004	\$ 7,729,349
Arlington	101	\$ 350,000	\$ 3,465	194	\$ 672,277
Bartlett	184	\$ 2,922,793	\$ 15,885	267	\$ 4,241,227
Collierville	111	\$ 1,602,477	\$ 14,437	260	\$ 3,753,550
Germantown	127	\$ 1,513,000	\$ 11,913	185	\$ 2,203,976
Lakeland	77	\$ 250,000	\$ 3,247	143	\$ 464,286
Memphis	3,043	\$ 19,575,000	\$ 6,433	3,527	\$ 22,688,474
Millington	88	\$ 251,300	\$ 2,856	154	\$ 439,775
TOTAL	4,514	29,484,570	\$ 62,092	6,734	\$ 42,192,913
Fayette County	101	\$ 121,000	\$ 1,198	161	\$ 192,881
Gallaway	27	\$ 25,224	\$ 934	45	\$ 42,040
Piperton	22	\$ 15,000	\$ 682	35	\$ 23,864
TOTAL	150	161,224	\$ 2,814	241	\$ 258,785
DeSoto County	663	\$ 750,000	\$ 1,131	1,265	\$ 1,430,995
Hernando	9	\$ 803,050	\$ 89,228	18	\$ 1,606,100
Horn Lake	28	\$ 441,000	\$ 15,750	53	\$ 834,750
Olive Branch	120	\$ 208,000	\$ 1,733	229	\$ 396,933
Southaven	101	\$ 962,727	\$ 9,532	193	\$ 1,839,666
TOTAL	921	3,164,777	\$ 117,374	1,758	\$ 6,108,445
Total MPO Area Lane Miles	5,585			8,733	
Total MPO Area Costs		\$ 32,810,571	\$ 182,281		\$ 48,560,143

*Calculated by carrying current per-mile expenses forward to 2026 miles maintained.

Table 30**EXISTING SYSTEM AND PROJECTED O & M COSTS: HORIZON YEAR TOTALS (Non-Transit)**

	2004-2006		2007-2016		20017-2026		2004-2026
Jurisdiction							TOTAL
State of Tennessee	\$	54,000,000	\$	200,000,000	\$	245,000,000	\$ 499,000,000
Shelby County	\$	9,702,184	\$	46,254,598	\$	67,660,728	\$ 123,617,510
Arlington	\$	1,093,947	\$	4,598,672	\$	6,063,569	\$ 11,756,188
Bartlett	\$	8,948,165	\$	33,722,591	\$	39,715,472	\$ 82,386,228
Collierville	\$	5,100,759	\$	23,357,972	\$	33,135,576	\$ 61,594,307
Germantown	\$	4,633,224	\$	17,485,601	\$	20,626,403	\$ 42,745,228
Lakeland	\$	779,221	\$	3,230,519	\$	4,204,545	\$ 8,214,286
Memphis	\$	59,149,565	\$	206,364,114	\$	220,516,267	\$ 486,029,946
Millington	\$	779,601	\$	3,155,528	\$	4,012,233	\$ 7,947,363
TOTAL	\$	90,186,666	\$	338,169,597	\$	395,934,792	\$ 824,291,055
Fayette County	\$	372,802	\$	1,455,050	\$	1,781,782	\$ 3,609,634
Gallaway	\$	77,965	\$	309,567	\$	386,004	\$ 773,536
Piperton	\$	46,209	\$	180,217	\$	220,506	\$ 446,932
TOTAL	\$	496,976	\$	1,944,834	\$	2,388,292	\$ 4,830,101
State of Mississippi	\$	1,087,208	\$	4,406,270	\$	5,921,659	\$ 11,415,137
DeSoto County	\$	2,342,863	\$	9,821,575	\$	12,917,009	\$ 25,081,448
Hernando	\$	2,518,657	\$	10,768,170	\$	14,418,398	\$ 27,705,225
Horn Lake*	\$	1,776,693	\$	5,752,330	\$	7,542,102	\$ 15,071,125
Olive Branch	\$	649,764	\$	2,724,091	\$	3,582,879	\$ 6,956,733
Southaven	\$	3,007,764	\$	12,616,836	\$	16,602,925	\$ 32,227,525
TOTAL	\$	10,295,740	\$	41,683,003	\$	55,063,313	\$ 107,042,056
TOTAL MPO AREA COSTS	\$	156,066,590	\$	586,203,703	\$	704,308,056	\$ 1,446,578,350

*States of Tennessee and Mississippi provided their O & M costs to 2026.

*Local O & M costs were projected on a straight line from current annual costs to 2026 annual costs.

2026 annual costs based on application of current cost per lane mile to future lane miles maintained.

*Horn Lake's 2004-2006 total contains \$400,000 bond financing.

2. Non-Transit Revenues

There are multiple revenue sources used to fund MPO area projects. Brief descriptions of these sources follow.

Non-Transit Revenue Sources

Federal funds are programmed to non-transit projects/programs in the Memphis MPO area with their required 20% match by the states of Mississippi and Tennessee. In addition to these federal funds, Mississippi also allocates revenue from State Construction Funds to road projects. **Table 31** offers brief descriptions of federal funding sources programmed by Tennessee and Mississippi.

Table 31 Federal Revenue Sources (Non-Transit)

Funding Category	Description
Congestion Management Air Quality Improvement Program (CMAQ)	Primarily provides funds to projects and programs in air quality non-attainment and maintenance areas for ozone, carbon monoxide (CO) and small particulate (PM-10), which reduce transportation emissions.
Bridge Replacement & Rehabilitation Program (BBR-S)	Supplies funds to aid states in their programs to replace and rehabilitate highway bridges and to make seismic retrofits to bridges located on any public road.
Interstate Maintenance Program (IM)	Grants funds for resurfacing, restoring, rehabilitating and reconstructing most interstate system routes.
National Corridor Planning and Development Program (NCPD)	Allocates funds to states and MPOs for coordinated planning, design, and construction of corridors of national significance, economic growth, and international or interregional trade.
National Highway System (NHS)	Allocates funds for improvements to rural and urban roads located on the NHS, including the interstate system and designated connections to major inter-modal terminals. Under unique circumstances, NHS funds may be used to fund transit improvements in NHS corridors.
Surface Transportation Program (STP)	Provides flexible funding that may be used by states and local agencies for projects located on federal-aid highways- including NHS, bridge projects- on any public road, transit capital projects and inter/intra city bus terminals and facilities. A share of the funds reserved for rural areas may be used on rural minor collectors.
Transportation Enhancements (TE)	Grants funds for transportation related activities that enhance the cultural, aesthetic or environmental aspects of the inter-modal transportation system. Projects funded under this category include bicycle and pedestrian facilities, beautifications, and historical renovations to transportation facilities.

Source: Federal Highway Administration Website: www.fhwa.dot.gov/tea21/factsheets/im.htm

Other federal revenue sources are also available. In particular, congressional earmarks are becoming an increasingly common method to finance projects. The nature of these earmarked funds may or may not require state or local leveraging. Because federal earmark funds cannot be clearly anticipated, they are not subject to detailed analysis in this plan.

A large percentage of the projects and programs in this plan will be funded through federal and state revenues. Local revenues are also required to implement the plan, both in leveraging state and federal program funds and as single-source funding for capital projects. Additionally, these funds are used by local jurisdictions to finance operations and maintenance expenditures. Local funds are derived from three principal sources in Tennessee and Mississippi.

1. State-Shared Taxes
2. Property Taxes
3. Capital Improvement Programming

(Tennessee State Shared Taxes) All local jurisdictions in the State of Tennessee receive funding from the state shared taxes listed above for transportation. At present, the largest source of transportation funding for local jurisdictions derived from state shared taxes comes from the petroleum taxes (gasoline, motor fuel, and special petroleum)(**Table 32**). Funds derived from the other state imposed taxes are usually placed in a jurisdiction's general fund. Within a jurisdiction's general revenue fund, it is nearly impossible to identify which revenue sources are used for specific expenditures; however, these dollars are used for transportation purposes. These funding sources make up the majority of local funds, which are used by cities and counties to finance transportation expenditures and are the funding sources for the basis of local funds for this plan.

Table 32 Tennessee Shared Revenue Sources (Non-Transit)

Funding Category	Description	Primary Recipients	Restrictions on Use	Distribution Basis
Sales and Use Tax	The retail sales and use tax is the state's largest single revenue source. These taxes are derived from the sale, use, consumption, distribution, lease, or rental of tangible personal property and of selected services. The current state sales tax in Tennessee is 7% and Shelby County's local sales tax is 2.25%.	State of TN, Counties, Municipalities	None	Population
Gasoline Tax	This tax is the largest shared revenue source for combined county and municipal governments. Shared gasoline revenues are restricted to funding street and road construction and mass transit projects. Tennessee's current tax rate is \$.20 per gallon.	TDOT, Counties, Municipalities	Limited to Roads and Mass Transit	Population, Land Area, Equal Shares
Motor Fuel Tax	This tax is imposed on the sale of diesel fuel and alternate vehicle fuels and is currently \$.017 per gallon.	TDOT, Counties, Municipalities	Limited to Roads and Mass Transit	Population, Land Area, Equal Shares
Gasoline Inspections Tax (Special Petroleum)	This tax is imposed on gasoline and oil sold in the state to ensure quality standards are met. The state's current tax for special petroleum is \$.01 per gallon.	TDOT, Counties, Municipalities, Center for Govt. Training	Limited to Roads	Population, Land Area, Equal Shares
Environmental Assessment Fee	This tax, currently \$.04 per gallon, is levied on gasoline and diesel.	Petroleum Underground Storage Tank Board	Limited to Roads and Mass Transit	Situs of Bank Deposits and Level of Property Taxes

Corporate Excise Tax	All corporations, for-profit cooperatives, joint stock associations, business trust, state and national banks, and savings and loans this tax annually on the net earnings from business done in the state. The present rate in Tennessee is 6.5%.	Counties, Municipalities	None	Situs of Bank Deposits and Level of Property Taxes
Hall Income Tax	This tax is levied only on certain types of dividend and interest income from stocks and bonds. Current rate is 6%.	Counties, Municipalities	None	Situs
Beer Excise Tax	This tax is placed on beer barrels sold at \$4.29 per barrel.	State of TN, Counties, Municipalities	None	Population and Equal Shares
Beer Wholesale Tax	This 17% excise tax is levied on the wholesale price collected by the wholesalers to the retailers.	Counties, Municipalities and TN Dept. of Revenue	None	Situs
Alcoholic Beverage Tax	This tax is levied on alcoholic beverages at \$4.40 per gallon for distilled spirits and \$1.21 for wine.	State of TN, Counties, Selected Municipalities	None	Population and Land Area
Mixed Drink Tax	Currently 15%, this tax levied on all alcoholic mixed drinks sold in the state.	State of TN, Counties, Municipalities	50% Earmarked to Education	Situs
Crude Oil and Natural Gas Severance Tax	Levied on severed oil and natural gas sold in the state.	State of TN, County	None	Situs
Coal Severance Tax	The current rate for this tax is \$.20 per ton of severed coal.	State of TN, County	County Schools, Highway & Stream Cleaning	Situs
Other Taxes	Includes locally levied taxes on tobacco, businesses, privileges, and severance as well as TVA payments.	15% of all local revenue is given to the State of TN.	None	Situs, Pop., Land Area, Equal Shares

Sources: Tennessee Department of Revenue, *Biennial Report, FY 96-97 & FY 97-98*, June 1999. ICF Consulting for the Nashville Area Metropolitan Planning Organization, *Regional Transportation Funding- A Strategic Review*, July 2002.

Note: Situs based distributions are distributions to the jurisdiction where a tax was collected.

(Mississippi State Shared Taxes) Similar to the State of Tennessee, Mississippi also levies taxes on numerous products and services, which in turn may be used on transportation projects. However, the State of Mississippi also imposes several taxes that are absent from the State of Tennessee's tax structure, mainly taxes imposed on income and gambling. The following levies (**Table 33**) make up the primary tax structure for the State of Mississippi (because of data limitations, a detailed description including the primary recipients, uses and distribution could not be completed):

Table 33: Mississippi Shared Revenue Sources (Non-Transit)

Funding Category	Total Collections FY 2003
Petroleum Tax	\$413,398,100
Sales Tax	\$2,261,303,328
Use Tax	\$200,142,955
Income Tax	\$1,309,873,343
Gaming Fees and Taxes	\$327,813,463
Alcoholic Beverages	\$52,575,098
Beer and Light Wine	\$30,229,127
Tobacco Tax	\$55,575,718
Corporate Tax	\$333,729,193
Estate Taxes	\$22,412,809
Other Taxes (privilege, severance, etc)	N/A

Source: Mississippi State Tax Commission, *Mississippi Tax Structure*, May 2000.

Like Tennessee, the largest source of transportation funding for local jurisdictions in Mississippi comes from petroleum taxes levied by the state (jurisdictions in Mississippi also use general funds to supplement funding for transportation projects when possible). In FY 2003, the State of Mississippi diverted 68% of funds collected from its petroleum tax to MDOT, 12.5% to the State Aid Road Fund, 9.8% to counties, and .037% to municipalities (Mississippi State Tax Commission, 2000).

Non-Transit Capital Projected Revenues

The assumption made by both the states of Tennessee and Mississippi is that the Memphis MPO area will continue to receive funding at an annual level equal to the average funding level authorized and programmed by the states under the funding limits of TEA-21. Both states found this to be a valid methodology for projecting revenues.

(State of Tennessee Programmed Revenue) The State of Tennessee reviewed past allocations for fiscal years 2000 to 2006 by funding source and obtained a seven-year average for NHS, IM, NCDP and SSTP which became the estimated annual revenue (**Table 34**).

Table 34
STATE OF TENNESSEE PROGRAMMED NON-TRANSIT REVENUES
Federal and State Sources FY-00 through FY-06
 constant dollars in thousands

Funding Source	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	Seven-Year Total	Seven-Year Average
FEDERAL									
IM	\$ 8,200	\$ 12,000	\$ 1,440	\$ 52,960	\$ 5,490	\$ 39,105	\$ 49,455	\$ 168,650	\$ 24,093
NHS	\$ 9,600	\$ 24,000	\$ 19,200	\$-	\$ 1,200	\$ 800	\$ 32,160	\$ 86,960	\$ 12,423
CMAQ							\$ 880	\$ 880	
BRR-S					\$ 16,000	\$ 16,000	\$ 16,000	\$ 48,000	
NCPD	\$-	\$-	\$ 2,400	\$-	\$-	\$-	\$ 48,000	\$ 50,400	\$ 7,200
SSTP	\$ 5,648	\$ 3,600	\$ 58,320	\$ 17,839	\$ 11,560	\$ 17,040	\$ 66,240	\$ 180,247	\$ 25,750
Federal Subtotal	\$ 23,448	\$ 39,600	\$ 81,360	\$ 70,799	\$ 34,250	\$ 72,945	\$ 212,735	\$ 535,137	\$ 69,465
STATE									
IM	\$ 2,050	\$ 3,000	\$ 360	\$ 13,240	\$ 610	\$ 4,345	\$ 5,495	\$ 29,100	\$ 4,157
NHS	\$ 2,400	\$ 6,000	\$ 4,800	\$-	\$ 300	\$ 200	\$ 8,040	\$ 21,740	\$ 3,106
CMAQ							\$ 220	\$ 220	
BRR-S					\$ 4,000	\$ 4,000	\$ 4,000	\$ 12,000	
NCPD	\$-	\$-	\$ 600	\$-	\$-	\$-	\$ 12,000	\$ 12,600	\$ 1,800
SSTP	\$ 1,412	\$ 900	\$ 14,580	\$ 4,460	\$ 2,140	\$ 4,260	\$ 16,560	\$ 44,312	\$ 6,330
State Subtotal	\$ 5,862	\$ 9,900	\$ 20,340	\$ 17,700	\$ 7,050	\$ 12,805	\$ 46,315	\$ 119,972	\$ 15,393
TOTAL POTENTIAL FUNDING	\$ 29,310	\$ 49,500	\$ 101,700	\$ 88,499	\$ 41,300	\$ 85,750	\$ 259,050	\$ 655,109	\$ 84,858

Source: TDOT

Table 35 details 2004-2026 State of Tennessee programmed and projected revenues. The 2006 allocations reflect the MPO's 2004-2006 TIP. The 2016 and 2026 NHS, IM, NCDP and SSTP revenues were arrived at by multiplying the estimated annual revenue obtained from **Table 34** by ten (the number of years included in each horizon year's forecast). The 2016 and 2026 CMAQ and BRR-S funds were estimated separately by the State of Tennessee. State revenue assumptions provide the matching funds for the federal programs at required matching levels.

Table 35
STATE OF TENNESSEE PROGRAMMED & PROJECTED REVENUES

Revenue Assumptions for Federal and State Sources by Horizon Year
constant dollars in thousands

Funding Source	Total 2004-2006	Total 2007-2016*	Total 2017-2026*	Total FY2004-2026
FEDERAL				
IM	\$ 94,050	\$ 240,929	\$ 240,929	\$ 575,908
NHS	\$ 34,160	\$ 124,229	\$ 124,229	\$ 282,618
CMAQ	\$ 880	\$ 30,000	\$ 30,000	\$ 60,880
BRR-S	\$ 48,000	\$ 32,000	\$ -	\$ 80,000
NCPD	\$ 48,000	\$ 72,000	\$ 72,000	\$ 192,000
SSTP	\$ 94,240	\$ 257,496	\$ 257,496	\$ 609,232
CESA*	\$ 2,400	\$ 15,600	\$ -	\$ 18,000
Federal Subtotal	\$ 321,730	\$ 772,253	\$ 724,654	\$ 1,818,637
STATE				
IM	\$ 10,450	\$ 41,571	\$ 41,571	\$ 93,593
NHS	\$ 8,540	\$ 31,057	\$ 31,057	\$ 70,654
BRR-S	\$ 12,000	\$ -	\$ -	\$ 12,000
CMAQ	\$ 220	\$ -	\$ -	\$ 220
NCPD	\$ 12,000	\$ 18,000	\$ 18,000	\$ 48,000
SSTP	\$ 23,560	\$ 63,303	\$ 63,303	\$ 150,166
CESA*	\$ 600	\$ 3,900	\$ -	\$ 4,500
State Subtotal	\$ 67,370	\$ 157,831	\$ 153,932	\$ 379,133
Total	\$ 389,100	\$ 930,084	\$ 878,586	\$ 2,197,770

*2016 & 2026 forecasts based on seven-year average (FY00-FY06)

*CESA (Congressional Earmark Special Appropriation)

(State of Mississippi Programmed Revenue) The State of Mississippi reviewed committed funding from fiscal years 2004 through 2010 and obtained a seven-year average (**Table 36**). This seven-year average became the basis for projecting future state and federal revenues for the horizon years of this plan (**Table 37**).

Table 36**STATE OF MISSISSIPPI NON-TRANSIT ACTUAL & COMMITTED REVENUES**

Federal and State Sources FY-04 through FY-10

Funding Source	FY-04	FY-05	FY-06	FY-07	FY-08	FY-09	FY-10	Seven-Year Total	Seven-Year Average
FEDERAL									
NHS	\$ 1,000,000	\$ 500,000	\$ 16,560,000	\$ 3,200,000	\$ -	\$ -	\$ 3,037,143	\$ 24,297,143	\$ 3,471,020
CMAQ					\$ 30,000		\$ 4,286	\$ 34,286	\$ 4,898
STP	\$12,350,400	\$ 3,600,000	\$ -	\$ 6,000,000	\$ 266,664	\$ 1,333,332	\$ 3,364,342	\$ 26,914,738	\$ 3,844,963
Federal Subtotal	\$ 13,350,400	\$ 4,100,000	\$ 16,560,000	\$ 9,200,000	\$ 296,664	\$ 1,333,332	\$ 6,405,771	\$ 51,246,167	\$ 7,320,881
STATE									
State Match	\$ 3,337,600	\$ 1,025,000	\$ 4,140,000	\$ 2,300,000	\$ 74,166	\$ 333,333	\$ 1,601,443	\$ 12,811,542	\$ 1,830,220
CFIP			\$ 26,608,333						
State Subtotal	\$ 3,337,600	\$ 1,025,000	\$ 30,748,333	\$ 2,300,000	\$ 74,166	\$ 333,333	\$ 1,601,443	\$ 39,419,875	\$ 5,631,411
TOTAL POTENTIAL	\$ 16,688,000	\$ 5,125,000	\$ 47,308,333	\$ 11,500,000	\$ 370,830	\$ 1,666,665	\$ 8,007,214	\$ 90,666,042	\$ 12,952,292

Source: MDOT

In **Table 37** the Mississippi 2006 revenue is the total committed by the State of Mississippi for fiscal years 2004 through 2006. The 2016 revenue forecast was obtained by adding committed funds from FY-07 to FY-10 to six years at the seven-year average from **Table 36**. 2026 totals are the seven-year averages multiplied by ten (FY-17 to FY-26). State revenue assumptions provide the matching funds for the federal programs at required matching levels.

Table 37**STATE OF MISSISSIPPI PROGRAMMED & PROJECTED NON-TRANSIT REVENUES**

Revenue Assumptions for Federal and State Sources by Horizon Year

Funding Source	Total 2004-2006	Total 2007-2016*	Total 2017-2026*	TOTAL FY2004-2026
FEDERAL				
NHS	\$ 18,060,000	\$ 155,422,530	\$ 163,069,468	\$ 336,551,998
CMAQ		\$ 63,674	\$ 48,980	\$ 112,654
STP	\$ 15,950,400	\$ 34,034,113	\$ 38,449,626	\$ 88,434,139
Federal Subtotal	\$ 34,010,400	\$ 189,520,317	\$ 201,568,074	\$ 425,098,791
STATE				
NHS Match	\$ 4,515,000	\$ 38,855,632	\$ 40,767,367	\$ 84,137,999
CMAQ Match		\$ 15,919	\$ 12,245	\$ 28,164
STP Match	\$ 3,987,600	\$ 8,508,528	\$ 9,612,406	\$ 22,108,534
STATE CONST	\$ 26,608,333	\$ -	\$ -	\$ 26,608,333
State Subtotal	\$ 35,110,933	\$ 47,380,079	\$ 50,392,018	\$ 132,883,030
TOTAL POTENTIAL FUNDING	\$ 69,121,333	\$ 236,900,396	\$ 251,960,092	\$ 557,981,821

*2006 revenue from adding fy-04, fy-05 and fy-06

*\$160,449,080 of the revenue in both 2007-2016 and 2017-2026 are associated with I-69 which is a congressionally promoted corridor. It is assumed this funding will be provided by congress once I-69 is officially designated.

*2016 revenue from adding committed funds from fy-07 through fy-10 to six years (fy-11 through fy-16) at seven-year average. The additional money represents the I-69 total.

*2026 revenue from seven year average (FY-04 through FY-10). The additional money represents the I-69 total.

(MPO Programmed Revenue) Table 38 details programmed and projected non-transit revenues by horizon years. The 2004-2006 allocations are from the 2004-2006 TIP. The estimated annual revenue for STP and CMAQ funds is the seven-year average of funds allocated over fiscal years 2000 through 2006.

Federal regulations on state STP Enhancement funding mandate that a state gets an amount equal to 10% of its total allocated STP money. There are no similar state guidelines so this methodology was used to forecast local STP Enhancement funding. The STP Enhancement seven-year average for each state is 10% of the amount of STP funds the MPO is allocated for that state.

Table 38

MPO PROGRAMMED & PROJECTED NON-TRANSIT REVENUE
Estimated Non-Transit Revenue 2004 - 2026
Long Range Transportation Plan

	2004-2006 TIP Allocations*	Estimated Annual Revenue*	Total 2007-2016	Total 2017-2026	Total 2004-2026
Tennessee (Shelby County & Fayette County)					
Local STP	\$ 78,932,163	\$ 10,700,000	\$ 107,000,000	\$ 107,000,000	\$ 292,932,163
CMAQ	\$ 28,519,100	\$ 3,600,000	\$ 36,000,000	\$ 36,000,000	\$ 100,519,100
STP Enhancement	\$ 7,819,141	\$ 1,000,000	\$ 10,000,000	\$ 10,000,000	\$ 27,819,141
Total	\$ 115,270,404	\$ 15,300,000	\$ 153,000,000	\$ 153,000,000	\$ 421,270,404
Local Match STP	\$ 19,545,541	\$ 2,675,000	\$ 26,750,000	\$ 26,750,000	\$ 73,045,541
Local Match CMAQ	\$ 2,339,000				\$ 2,339,000
Local Match Enhancement	\$ 1,954,784	\$ 250,000	\$ 2,500,000	\$ 2,500,000	\$ 6,954,784
Total Local Match	\$ 23,839,325	\$ 2,925,000	\$ 29,250,000	\$ 29,250,000	\$ 82,339,325
Total Funds Tennessee	\$ 139,109,729	\$ 18,225,000	\$ 182,250,000	\$ 182,250,000	\$ 503,609,729
Mississippi (DeSoto County)					
Local STP*	\$ 4,255,395	\$ 1,034,709	\$ 12,524,485	\$ 10,347,090	\$ 27,126,970
STP Enhancement	\$ -	\$ 100,000	\$ 1,000,000	\$ 1,000,000	\$ 2,000,000
Total	\$ 4,255,395	\$ 1,134,709	\$ 13,524,485	\$ 11,347,090	\$ 29,126,970
Local Match STP*	\$ 1,054,349	\$ 258,677	\$ 3,131,118	\$ 2,586,770	\$ 6,772,237
Local Match Enhancement	\$ -	\$ 25,000	\$ 250,000	\$ 250,000	\$ 500,000
Total Local Match	\$ 1,054,349	\$ 283,677	\$ 3,381,118	\$ 2,836,770	\$ 7,272,237
Total Funds Mississippi	\$ 5,309,744	\$ 1,418,386	\$ 16,905,603	\$ 14,183,860	\$ 36,399,207

*Source of 2004-2006 TIP Allocations is the 2004-2006 TIP

*Estimated Annual Revenue based on a seven-year average of allocations from 2000 to 2006

*The 2016 DeSoto revenues include reserve funds of \$2,177,395 Local STP funds and \$544,348 Local Match STP funds.

(Locally Programmed Revenues) (Table 39)

- Local CIP funds

Local jurisdictions reviewed past CIP budgets or funds committed to road construction if they do not have CIPs. The estimated annual average for the counties is the cumulative estimate of all jurisdictions in each county

In Shelby County, the City of Memphis contributes the bulk of these CIP funds at \$25 million followed by Shelby County at \$8 million. The remaining jurisdictions in Shelby County contribute a cumulative \$2.5 million annually. In DeSoto County \$15 million annually is programmed for road construction. Fayette County has no CIP projects currently identified within the MPO area between 2007 and 2026. Future projects identified by Fayette County will be included in future plans.

- Private Funds

Jurisdictions within the MPO have analyzed approved development applications over the past five to nine years and provided an average annual contribution of private development to the construction and acquisition of roadways in the area. The City of Memphis estimates that on average it receives \$1.7 million annually in either construction or payments-in-lieu-of-construction from private development. The figure for the balance of Shelby County is \$6.5 million dollars. DeSoto County estimates that \$2 million annually is received. Fayette County, within the MPO area, has had few approved developments in recent years. The locally programmed projects identified in Fayette County will be dependent on private funds for development, according to Piperton officials (projects are in Piperton area).

Table 39

LOCAL JURISDICTION PROGRAMMED & PROJECTED NON-TRANSIT REVENUE
Estimated Non-Transit Revenue 2004 - 2026
Long Range Transportation Plan

	Total 2004-2006	Estimated Annual Revenue*	Total 2007-2016	Total 2017-2026	Total 2004-2026
Shelby County					
Local CIP	\$ 106,437,766	\$ 35,500,000	\$ 355,000,000	\$ 355,000,000	\$ 816,437,766
Private Funds	\$ 22,500,000	\$ 8,200,000	\$ 82,000,000	\$ 82,000,000	\$ 186,500,000
Total Funds Shelby County	\$ 128,937,766	\$ 43,700,000	\$ 437,000,000	\$ 437,000,000	\$ 1,002,937,766
DeSoto County					
Local CIP	\$ 6,000,000	\$ 15,000,000	\$ 150,000,000	\$ 150,000,000	\$ 306,000,000
Private Funds	\$ 4,227,863	\$ 2,000,000	\$ 20,000,000	\$ 20,000,000	\$ 44,227,863
Total Funds DeSoto County	\$ 10,227,863	\$ 17,000,000	\$ 170,000,000	\$ 170,000,000	\$ 350,227,863
Fayette County					
Local CIP	\$ -	\$ -	\$ -	\$ -	\$ -
Private Funds	\$ -	\$ -	\$ 11,879,387	\$ 3,324,000	\$ 15,203,387
Total Funds Fayette County	\$ -	\$ -	\$ 11,879,387	\$ 3,324,000	\$ 15,203,387

*Estimated Annual Revenue based on a seven-year average of allocations from 2000 to 2006

*CIP funds from Shelby County CIP, City of Memphis CIP, DeSoto County CIP, estimated revenue of all other local jurisdictions, and taxes dollars described in **Tables 32** and **Table 33**.

*Private funds is average past allocations based on a review done by local jurisdictions.

Table 40 presents all of the revenues detailed above in one table by horizon years.

Table 40
TENNESSEE REVENUE
2004-2026 by Horizon Year

	TOTAL 2004-2006	TOTAL 2007-2016	TOTAL 2017-2026	TOTAL 2004-2026
Programmed by State of TN				
IM	\$ 104,500,000	\$ 282,500,000	\$ 282,500,000	\$ 669,500,000
NHS	\$ 42,700,000	\$ 155,286,000	\$ 155,286,000	\$ 353,272,000
NCPD	\$ 60,000,000	\$ 90,000,000	\$ 90,000,000	\$ 240,000,000
SSTP	\$ 117,800,000	\$ 320,799,000	\$ 320,799,000	\$ 759,398,000
CMAQ (State)	\$ 1,100,000	\$ 30,000,000	\$ 30,000,000	\$ 61,100,000
BRR-S	\$ 60,000,000	\$ 32,000,000	\$ -	\$ 92,000,000
CESA*	\$ 3,000,000	\$ 19,500,000	\$ -	\$ 22,500,000
Subtotal	\$ 389,100,000	\$ 930,085,000	\$ 878,585,000	\$ 2,197,770,000
Programmed by MPO				
CMAQ (Local)	\$ 30,858,100	\$ 36,000,000	\$ 36,000,000	\$ 102,858,100
LSTP	\$ 98,477,704	\$ 133,750,000	\$ 133,750,000	\$ 365,977,704
ENHANCEMENT	\$ 9,773,925	\$ 12,500,000	\$ 12,500,000	\$ 34,773,925
Subtotal	\$ 139,109,729	\$ 182,250,000	\$ 182,250,000	\$ 503,609,729
Programmed by Local Jurisdiction				
LOCAL (Shelby)	\$ 128,937,766	\$ 437,000,000	\$ 437,000,000	\$ 1,002,937,766
LOCAL (Fayette)	\$ -	\$ 11,879,387	\$ 3,324,000	\$ 15,203,387
TOTAL	\$ 657,147,495	\$ 1,561,214,387	\$ 1,501,159,000	\$ 3,719,520,882

*CESA (Congressional Earmark Special Appropriation)

MISSISSIPPI REVENUE
2004-2026 by Horizon Year

	TOTAL 2004-2006	TOTAL 2007-2016	TOTAL 2017-2026	TOTAL 2004-2026
Programmed by State of MS				
NHS*	\$ 22,575,000	\$ 194,278,162	\$ 203,836,835	\$ 420,689,997
MSSTP	\$ 19,938,000	\$ 42,542,641	\$ 48,062,032	\$ 110,542,673
CMAQ	\$ -	\$ 79,593	\$ 61,225	\$ 140,818
STATE CONSTRUCTION FUNDS	\$ 26,608,333	\$ -	\$ -	\$ 26,608,333
Subtotal	\$ 69,121,333	\$ 236,900,396	\$ 251,960,092	\$ 557,981,821
Programmed by MPO				
LSTP	\$ 5,309,744	\$ 15,655,603	\$ 12,933,860	\$ 33,899,207
ENHANCEMENT	\$ -	\$ 1,250,000	\$ 1,250,000	\$ 2,500,000
Subtotal	\$ 5,309,744	\$ 16,905,603	\$ 14,183,860	\$ 36,399,207
Programmed by Local Jurisdiction				
LOCAL	\$ 10,227,863	\$ 170,000,000	\$ 170,000,000	\$ 350,227,863
TOTAL	\$ 84,658,940	\$ 423,805,999	\$ 436,143,952	\$ 944,608,891

*NHS 2007-2026 assumes congressional funding for I-69 as NHS funding or equivalent.

Non-Transit Operation and Maintenance Revenues

A combination of property tax, sales tax and state-shared taxes are used to fund operations and maintenance (see descriptions of sources in **Tables 32 & 33**). In the smaller municipalities and Fayette County, these revenues are administered through general budgets while the City of Memphis, Shelby County and DeSoto County use CIP programming in addition to general funds for O & M expenses. Additionally all local jurisdictions receive contributions from developers either in the form of dedication of rights-of-way and improvement of the roadway or a payment-in-lieu-of improvement requirement.

The assumption regarding O & M revenues is that sufficient funds will continue to be available for the 23 years of this plan because the sources of revenue will remain proportionate to jurisdiction size and will therefore continue to be sufficient to cover all expenses (**Table 41**). This is assumed for both Tennessee and Mississippi.

Table 41

EXISTING SYSTEM AND PROJECTED O & M REVENUES: HORIZON YEAR TOTALS (Non-Transit)

	2004-2006	2007-2016	20017-2026	2004-2026 TOTAL
Jurisdiction				
State of Tennessee	\$ 54,000,000	\$ 200,000,000	\$ 245,000,000	\$ 499,000,000
Shelby County	\$ 9,702,184	\$ 46,254,598	\$ 67,660,728	\$ 123,617,510
Arlington	\$ 1,093,947	\$ 4,598,672	\$ 6,063,569	\$ 11,756,188
Bartlett	\$ 8,948,165	\$ 33,722,591	\$ 39,715,472	\$ 82,386,228
Collierville	\$ 5,100,759	\$ 23,357,972	\$ 33,135,576	\$ 61,594,307
Germantown	\$ 4,633,224	\$ 17,485,601	\$ 20,626,403	\$ 42,745,228
Lakeland	\$ 779,221	\$ 3,230,519	\$ 4,204,545	\$ 8,214,286
Memphis	\$ 59,149,565	\$ 206,364,114	\$ 220,516,267	\$ 486,029,946
Millington	\$ 779,601	\$ 3,155,528	\$ 4,012,233	\$ 7,947,363
TOTAL	\$ 90,186,666	\$ 338,169,597	\$ 395,934,792	\$ 824,291,055
Fayette County	\$ 372,802	\$ 1,455,050	\$ 1,781,782	\$ 3,609,634
Gallaway	\$ 77,965	\$ 309,567	\$ 386,004	\$ 773,536
Piperton	\$ 46,209	\$ 180,217	\$ 220,506	\$ 446,932
TOTAL	\$ 496,976	\$ 1,944,834	\$ 2,388,292	\$ 4,830,101
State of Mississippi	\$ 1,087,208	\$ 4,406,270	\$ 5,921,659	\$ 11,415,137
DeSoto County	\$ 2,342,863	\$ 9,821,575	\$ 12,917,009	\$ 25,081,448
Hernando	\$ 2,518,657	\$ 10,768,170	\$ 14,418,398	\$ 27,705,225
Horn Lake*	\$ 1,776,693	\$ 5,752,330	\$ 7,542,102	\$ 15,071,125
Olive Branch	\$ 649,764	\$ 2,724,091	\$ 3,582,879	\$ 6,956,733
Southaven	\$ 3,007,764	\$ 12,616,836	\$ 16,602,925	\$ 32,227,525
TOTAL	\$ 10,295,740	\$ 41,683,003	\$ 55,063,313	\$ 107,042,056
TOTAL MPO AREA REVENUES	\$ 156,066,590	\$ 586,203,703	\$ 704,308,056	\$ 1,446,578,350

3. Costs Versus Revenue Analysis

This section compares the identified costs with estimated available revenue (both presented above). **Table 42** analyzes capital costs versus revenue and **Table 43** analyzes operation and maintenance costs versus revenue. Each table is organized by the entity responsible for programming funds. Revenues and costs are presented by funding source and horizon year with a 2004-2026 plan total. These tables detail the fiscal constraint of this plan.

Table 42

NON-TRANSIT CAPITAL COSTS VS. REVENUES BY HORIZON YEAR
Long Range Transportation Plan

Project Funding Source	2006			2016			2026			2004-2026 Non-Transit Plan Summary		
	Cost	Revenue	Balance	Cost	Revenue	Balance	Cost	Revenue	Balance	Cost	Revenue	Balance
State of Tennessee												
IM	\$ 104,500,000	\$ 104,500,000	\$ -	\$ 272,500,000	\$ 282,500,000	\$ 10,000,000	\$ 3,969,624	\$ 282,500,000	\$ 278,530,376	\$ 380,969,624	\$ 669,500,000	\$ 288,530,376
NHS	\$ 42,700,000	\$ 42,700,000	\$ -	\$ 48,225,040	\$ 155,286,000	\$ 107,060,960	\$ 886,830	\$ 155,286,000	\$ 154,399,170	\$ 91,811,870	\$ 353,272,000	\$ 261,460,130
NCPD	\$ 60,000,000	\$ 60,000,000		\$ 90,000,000	\$ 90,000,000	\$ -	\$ 90,000,000	\$ 90,000,000	\$ -	\$ 240,000,000	\$ 240,000,000	\$ -
SSTP	\$ 117,800,000	\$ 117,800,000	\$ -	\$ 320,799,000	\$ 320,799,000	\$ -	\$ 188,584,625	\$ 320,799,000	\$ 132,214,375	\$ 627,183,625	\$ 759,398,000	\$ 132,214,375
CMAQ	\$ 1,100,000	\$ 1,100,000	\$ -	\$ 30,000,000	\$ 30,000,000	\$ -	\$ 30,000,000	\$ 30,000,000	\$ -	\$ 61,100,000	\$ 61,100,000	\$ -
BRR-S	\$ 60,000,000	\$ 60,000,000	\$ -	\$ 32,000,000	\$ 32,000,000	\$ -	\$ -	\$ -	\$ -	\$ 92,000,000	\$ 92,000,000	\$ -
CESA	\$ 3,000,000	\$ 3,000,000	\$ -	\$ 19,500,000	\$ 19,500,000	\$ -	\$ -	\$ -	\$ -	\$ 22,500,000	\$ 22,500,000	\$ -
TOTAL	\$ 389,100,000	\$ 389,100,000	\$ -	\$ 813,024,040	\$ 930,085,000	\$ 117,060,960	\$ 313,441,079	\$ 878,585,000	\$ 565,143,921	\$1,515,565,119	\$2,197,770,000	\$ 682,204,881
State of Mississippi												
NHS	\$ 1,686,600	\$ 22,575,000	\$ 20,888,400	\$ 173,014,262	\$ 194,278,162	\$ 21,263,900	\$ 166,449,080	\$ 203,836,835	\$ 37,387,755	\$ 341,149,942	\$ 420,689,997	\$ 79,540,055
MSSTP	\$ 5,152,333	\$ 19,938,000	\$ 14,785,667	\$ 24,014,873	\$ 42,542,641	\$ 18,527,768	\$ 45,375,898	\$ 48,062,032	\$ 2,686,134	\$ 74,543,104	\$ 110,542,673	\$ 35,999,569
CMAQ	\$ -	\$ -	\$ -	\$ -	\$ 79,593	\$ 79,593	\$ -	\$ 61,225	\$ 61,225	\$ -	\$ 140,818	\$ 140,818
CASINO	\$ 26,608,333	\$ 26,608,333	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,608,333	\$ 26,608,333	\$ -
TOTAL	\$ 33,447,266	\$ 69,121,333	\$ 35,674,067	\$ 197,029,135	\$ 236,900,396	\$ 39,871,261	\$ 211,824,978	\$ 251,960,092	\$ 40,135,114	\$ 442,301,379	\$ 557,981,821	\$ 115,680,442
MPO												
TN CMAQ	\$ 30,670,000	\$ 30,858,100	\$ 188,100	\$ 36,000,000	\$ 36,000,000	\$ -	\$ 35,371,600	\$ 36,000,000	\$ 628,400	\$ 102,041,600	\$ 102,858,100	\$ 816,500
TN LSTP	\$ 98,043,500	\$ 98,477,704	\$ 434,204	\$ 133,317,676	\$ 133,750,000	\$ 432,324	\$ 133,750,000	\$ 133,750,000	\$ -	\$ 365,111,176	\$ 365,977,704	\$ 866,528
TN Enhancement	\$ 9,773,925	\$ 9,773,925	\$ -	\$ 3,480,431	\$ 12,500,000	\$ 9,019,569	\$ -	\$ 12,500,000	\$ 12,500,000	\$ 13,254,356	\$ 34,773,925	\$ 21,519,569
MS LSTP	\$ 2,588,000	\$ 5,309,744	\$ 2,721,744	\$ 13,557,901	\$ 15,655,603	\$ 2,097,702	\$ 11,926,785	\$ 12,933,860	\$ 1,007,075	\$ 28,072,686	\$ 33,899,207	\$ 5,826,521
MS Enhancement	\$ -	\$ -	\$ -	\$ -	\$ 1,250,000	\$ 1,250,000	\$ -	\$ 1,250,000	\$ 1,250,000	\$ -	\$ 2,500,000	\$ 2,500,000
TOTAL	\$ 141,075,425	\$ 144,419,473	\$ 3,344,048	\$ 186,356,008	\$ 199,155,603	\$ 12,799,595	\$ 181,048,385	\$ 196,433,860	\$ 15,385,475	\$ 508,479,818	\$ 540,008,936	\$ 31,529,118
Local												
Shelby	\$ 20,638,801	\$ 128,937,766	\$ 108,298,965	\$ 388,012,090	\$ 437,000,000	\$ 48,987,910	\$ 424,268,463	\$ 437,000,000	\$ 12,731,537	\$ 832,919,354	\$1,002,937,766	\$ 170,018,412
DeSoto	\$ 10,227,863	\$ 10,227,863	\$ -	\$ 126,704,181	\$ 170,000,000	\$ 43,295,819	\$ 92,883,502	\$ 170,000,000	\$ 77,116,498	\$ 229,815,546	\$ 350,227,863	\$ 120,412,317
Fayette	\$ -	\$ -	\$ -	\$ 11,879,387	\$ 11,879,387	\$ -	\$ 3,324,000	\$ 3,324,000	\$ -	\$ 15,203,387	\$ 15,203,387	\$ -
TOTAL	\$ 30,866,664	\$ 139,165,629	\$ 108,298,965	\$ 526,595,658	\$ 618,879,387	\$ 92,283,729	\$ 520,475,965	\$ 610,324,000	\$ 89,848,035	\$1,077,938,287	\$1,368,369,016	\$ 290,430,729
TOTAL NON-TRANSIT	\$ 594,489,355	\$ 741,806,435	\$ 147,317,080	\$1,723,004,841	\$1,985,020,386	\$ 262,015,545	\$1,226,790,407	\$1,937,302,952	\$ 710,512,545	\$3,544,284,603	\$4,664,129,773	\$ 1,119,845,170

Table 43

NON-TRANSIT O & M COSTS VS. REVENUES BY HORIZON YEAR
Long Range Transportation Plan

Jurisdiction	2006			2016			2026			2004-2026 Non-Transit Plan Summary		
	Cost	Revenue	Balance	Cost	Revenue	Balance	Cost	Revenue	Balance	Cost	Revenue	Balance
State of Tennessee	\$ 54,000,000	\$ 54,000,000	\$ -	\$ 200,000,000	\$ 200,000,000	\$ -	\$ 245,000,000	\$ 245,000,000	\$ -	\$ 499,000,000	\$ 499,000,000	\$ -
Shelby County	\$ 9,702,184	\$ 9,702,184	\$ -	\$ 46,254,598	\$ 46,254,598	\$ -	\$ 67,660,728	\$ 67,660,728	\$ -	\$ 123,617,510	\$ 123,617,510	\$ -
Arlington	\$ 1,093,947	\$ 1,093,947	\$ -	\$ 4,598,672	\$ 4,598,672	\$ -	\$ 6,063,569	\$ 6,063,569	\$ -	\$ 11,756,188	\$ 11,756,188	\$ -
Bartlett	\$ 8,948,165	\$ 8,948,165	\$ -	\$ 33,722,591	\$ 33,722,591	\$ -	\$ 39,715,472	\$ 39,715,472	\$ -	\$ 82,386,228	\$ 82,386,228	\$ -
Collierville	\$ 5,100,759	\$ 5,100,759	\$ -	\$ 23,357,972	\$ 23,357,972	\$ -	\$ 33,135,576	\$ 33,135,576	\$ -	\$ 61,594,307	\$ 61,594,307	\$ -
Germantown	\$ 4,633,224	\$ 4,633,224	\$ -	\$ 17,485,601	\$ 17,485,601	\$ -	\$ 20,626,403	\$ 20,626,403	\$ -	\$ 42,745,228	\$ 42,745,228	\$ -
Lakeland	\$ 779,221	\$ 779,221	\$ -	\$ 3,230,519	\$ 3,230,519	\$ -	\$ 4,204,545	\$ 4,204,545	\$ -	\$ 8,214,286	\$ 8,214,286	\$ -
Memphis	\$ 59,149,565	\$ 59,149,565	\$ -	\$ 206,364,114	\$ 206,364,114	\$ -	\$ 220,516,267	\$ 220,516,267	\$ -	\$ 486,029,946	\$ 486,029,946	\$ -
Millington	\$ 779,601	\$ 779,601	\$ -	\$ 3,155,528	\$ 3,155,528	\$ -	\$ 4,012,233	\$ 4,012,233	\$ -	\$ 7,947,363	\$ 7,947,363	\$ -
TOTAL	\$ 90,186,666	\$ 90,186,666	\$ -	\$ 338,169,597	\$ 338,169,597	\$ -	\$ 395,934,792	\$ 395,934,792	\$ -	\$ 824,291,055	\$ 824,291,055	\$ -
Fayette County	\$ 372,802	\$ 372,802	\$ -	\$ 1,455,050	\$ 1,455,050	\$ -	\$ 1,781,782	\$ 1,781,782	\$ -	\$ 3,609,634	\$ 3,609,634	\$ -
Gallaway	\$ 77,965	\$ 77,965	\$ -	\$ 309,567	\$ 309,567	\$ -	\$ 386,004	\$ 386,004	\$ -	\$ 773,536	\$ 773,536	\$ -
Piperton	\$ 46,209	\$ 46,209	\$ -	\$ 180,217	\$ 180,217	\$ -	\$ 220,506	\$ 220,506	\$ -	\$ 446,932	\$ 446,932	\$ -
TOTAL	\$ 496,976	\$ 496,976	\$ -	\$ 1,944,834	\$ 1,944,834	\$ -	\$ 2,388,292	\$ 2,388,292	\$ -	\$ 4,830,101	\$ 4,830,101	\$ -
State of Mississippi	\$ 1,087,208	\$ 1,087,208	\$ -	\$ 4,406,270	\$ 4,406,270	\$ -	\$ 5,921,659	\$ 5,921,659	\$ -	\$ 11,415,137	\$ 11,415,137	\$ -
DeSoto County	\$ 2,342,863	\$ 2,342,863	\$ -	\$ 9,821,575	\$ 9,821,575	\$ -	\$ 12,917,009	\$ 12,917,009	\$ -	\$ 25,081,448	\$ 25,081,448	\$ -
Hernando	\$ 2,518,657	\$ 2,518,657	\$ -	\$ 10,768,170	\$ 10,768,170	\$ -	\$ 14,418,398	\$ 14,418,398	\$ -	\$ 27,705,225	\$ 27,705,225	\$ -
Horn Lake*	\$ 1,776,693	\$ 1,776,693	\$ -	\$ 5,752,330	\$ 5,752,330	\$ -	\$ 7,542,102	\$ 7,542,102	\$ -	\$ 15,071,125	\$ 15,071,125	\$ -
Olive Branch	\$ 649,764	\$ 649,764	\$ -	\$ 2,724,091	\$ 2,724,091	\$ -	\$ 3,582,879	\$ 3,582,879	\$ -	\$ 6,956,733	\$ 6,956,733	\$ -
Southaven	\$ 3,007,764	\$ 3,007,764	\$ -	\$ 12,616,836	\$ 12,616,836	\$ -	\$ 16,602,925	\$ 16,602,925	\$ -	\$ 32,227,525	\$ 32,227,525	\$ -
TOTAL	\$ 10,295,740	\$ 10,295,740	\$ -	\$ 41,683,003	\$ 41,683,003	\$ -	\$ 55,063,313	\$ 55,063,313	\$ -	\$ 107,042,056	\$ 107,042,056	\$ -
TOTAL NON-TRANSIT	\$ 156,066,590	\$ 156,066,590	\$ -	\$ 586,203,703	\$ 586,203,703	\$ -	\$ 704,308,056	\$ 704,308,056	\$ -	\$ 1,446,578,350	\$ 1,446,578,350	\$ -

B. Transit

This section details transit costs and revenues. It first presents the costs by horizon year in two categories, capital project costs and operations and maintenance costs. Estimated future revenues by source are then analyzed using those same two categories and horizon years. Finally, there is an overlay of costs and revenues portion, which demonstrates fiscal constraint of the transit investments in this plan.

1. Transit Costs

Transit costs are either considered “capital” (e.g., planning, engineering and construction and acquisition of facilities and equipment), or “operations and maintenance” (e.g., labor, fuel and materials). MATA has provided a detailed analysis of costs over the twenty-three years of this plan for both of these categories. The fixed guideway system that is being developed and the existing and planned bus system are examined.

Transit Capital Project Costs

Cost estimates for the various projects in the capital plan were taken from the following sources:

- **Fixed Guideways** - studies conducted by MATA on the Regional Rail Program which included corridor specific cost estimates for all projects.
- **Passenger Terminals** - historical information on the cost of previous similar projects supplemented by site-specific information generated by in-house analyses by MATA staff.
- **Other Capital Projects** - historical information on the cost of previous similar projects.

The total costs of each fixed guideway project along with passenger terminals and other capital projects are shown in **Table 44** below. Descriptions of these projects follow.

Table 44				
Existing System and Projected Capital Costs: Horizon Year Totals (Transit)				
	2006	2016	2026	Total
Fixed Guideway Projects				
Downtown-Airport Corridor	\$104,648,317	\$271,310,452	\$0	\$375,958,769
Southeast Corridor	\$18,966,925	\$0	\$455,206,214	\$474,173,139
South Corridor	\$0	\$0	\$308,830,396	\$308,830,396
North Corridor	\$0	\$0	\$3,878,521	\$3,878,521
<i>Subtotal- Fixed Guideway</i>	\$123,615,242	\$271,310,452	\$767,915,131	\$1,162,840,825
Passenger Terminals & Other Capital Projects				
	\$24,993,046	\$83,310,150	\$83,310,150	\$191,613,346
Total Capital	\$148,608,288	\$354,620,602	\$851,225,281	\$1,354,454,171

(Fixed Guideways) For the Fixed Guideway projects, an implementation schedule of eight years is assumed from the beginning of detailed planning studies to completion of construction. Planning activities include System Planning, Alternatives Analysis, and preparation of the Draft Environmental Impact Statement (EIS). Subsequent major phases include Preliminary Engineering, Final Design, and Construction. Based on the eight-year schedule, the major elements of work are expected to have durations as shown below.

Phases	Approx. Duration
Alternatives Analysis/Draft EIS	12 months/1 year
Preliminary Engineering/Final EIS and related activities	12 months/1 year
Final Design and related activities	24 months/2 years
Construction	48 months/4 years
Right-of-Way	
Utility Relocation	
Guideway/Systems/Station Construction	
Yard and Shop Construction	
Vehicles	

Project Management activities would take place throughout the project duration.

Costs are spread over the project period based on the following assumptions about the percentage of costs incurred in each phase in each year, as follows:

	Year	% of Cost
Alternatives Analysis/Draft EIS	1	1%
Preliminary Engineering/Final EIS and related activities	2	3%
Final Design and related activities	3	3%
	4	3%
Construction	5	20%
	6	35%
	7	20%
	8	15%

For the purpose of this analysis, it has been assumed that the fixed guideway corridors will be built out one at a time and proceeding through the same process and on the same schedule as described previously. It is further assumed that when one corridor nears the end of Final Design, System Planning will begin on the next priority corridor. Although no formal priorities have been established after the Downtown-Airport line, the build-out scenario presented below is based on the assumption that the corridor with the highest projected ridership per mile would be built first (remainder of the Southeast Corridor), followed by the second highest (South Corridor), and lastly, the lowest (North Corridor). The timetable for initiation of service on each of the lines is shown below.

Corridor	Segment	Project Development Period
		Planning/ Engineering/Construction)
Southeast	Downtown-Airport	2002-2009
Southeast	Remainder of corridor to Collierville	2016-2022*
South	Downtown-Southaven	2018-2025
North	Downtown-Millington	2026-2033

*Alternatives Analysis/Draft EIS funded in 2006.

(Passenger Terminals and Other Capital Projects) The transit plan includes a system of five transit centers at various locations in suburban areas, a system of six park-and-ride lots focused on I-40 and I-55, and two major intermodal terminals. Also included are routine capital projects such as replacement of rolling stock and maintenance of infrastructure.

Transit Operations and Maintenance Costs

Cost estimates for the various elements of the transit operations and maintenance plan were taken from the following sources:

- **Existing System and Service Improvements** - MATA's existing annual operating budget. Historically, MATA manages its operating budget by continually evaluating effectiveness and efficiency of service delivery. Route changes are made semi-annually to align service with changing demand. It is assumed that the same approach will continue into the future and that proposed service improvements, except for fixed guideways, can be implemented within the existing budget.
- **Fixed Guideways** - studies conducted by MATA on the Regional Rail Program which included corridor specific operations and maintenance cost for all projects.

The total costs of operations and maintenance for each fixed guideway project along with passenger terminals and other capital projects are shown in **Table 45** below.

Table 45
Existing System and Projected Operations
and Maintenance Costs: Horizon Year Totals (Transit)

	2006	2016	2026	Total
Existing system	\$125,785,383	\$419,284,610	\$419,284,610	\$964,354,603
Fixed Guideway Projects				
Medical Center Extension	\$3,853,269	\$12,844,230	\$12,844,230	\$29,541,729
Downtown-Airport Line	\$0	\$87,007,676	\$124,296,680	\$211,304,356
Southeast Corridor	\$0	\$0	\$43,510,292	\$43,510,292
South Corridor	\$0	\$0	\$6,085,957	\$6,085,957
North Corridor	\$0	\$0	\$0	\$0
<i>Subtotal- Fixed Guideway</i>	\$3,853,269	\$99,851,906	\$186,737,159	\$290,442,334
Total Operating	\$129,638,652	\$519,136,516	\$606,021,769	\$1,254,796,937

2. Transit Revenues

The Memphis Area Transit Authority (MATA) currently derives its funding from three public sources. These sources are: (1) Federal Transit Administration (FTA), (2) City of Memphis, and (3) Tennessee Department of Transportation (TDOT). Brief descriptions of these sources follow.

Transit Revenue Sources

Funding shares by source differ greatly depending on whether the costs are considered capital or operations and maintenance. FTA is the predominant funding source for capital needs, with matching funds contributed by the City of Memphis and TDOT. The City of Memphis is the largest contributor of operations funding followed by TDOT. FTA provides no operating funds, although certain costs associated with preventive maintenance of capital assets and provision of paratransit service are eligible expenses under the capital program. MATA generates a portion of its operations and maintenance funding through passenger fares and other system-generated revenues, such as advertising.

(Federal Transit Administration Funding) The federal funding partner for capital costs of rail projects and other smaller capital improvements is FTA, an agency of the U.S. Department of Transportation. FTA programs are expected to provide capital funding for planning, engineering and construction of Major Capital Projects (Fixed Guideways and Passenger Terminals) and Other Capital Projects.

MATA is eligible for capital funding from several FTA programs: (1) Section 5307-Formula, (2) Section 5309-Fixed Guideway Modernization, (3) Section 5309-New Starts, and (4) Section 5309-Bus. Formula funds are distributed nationwide based on a formula that includes factors such as population, population density, miles of service, and ridership. Section 5309-Fixed Guideway Modernization funds are distributed by a formula to agencies that have rail systems that are more than seven years old for capital expenses on those rail lines. Section 5309-New Starts and Section 5309-Bus funds are discretionary in nature and are allocated for specific projects by FTA and Congress.

The Formula program generally funds on-going, routine capital needs, such as bus facilities, and equipment – both new assets and rehabilitation or replacement of existing assets. FTA provides 80% of the cost of items funded by the Formula program. Matching funds are provided by the City of Memphis and TDOT, generally at 10% each. A portion of these funds are transferred to MATA's operating budget and used to cover certain Preventive Maintenance and ADA Paratransit expenses. The Section 5309-Fixed Guideway Modernization program uses the same funding ratios of 80% federal/10% City/10% TDOT.

MATA's current major fixed guideway capital projects are funded by Section 5309-New Starts. These funds are allocated at the federal level on a competitive basis. Due to the

project-specific nature of this program, funding varies by year. The Medical Center Rail Extension project receives its federal funding from the New Starts program. The annual allocation of federal New Starts funds for this project is as follows:

<u>Year</u>	<u>Federal Share</u>
2000 and Prior	\$ 9,885,848
2001	\$ 5,943,856
2002	\$18,978,554
2003	\$15,353,721
2004 (proposed)	\$ 9,200,000
Subtotal - Federal	<u>\$59,361,979</u>
City of Memphis	\$ 7,420,248
TDOT	<u>\$ 7,420,247</u>
TOTAL	\$74,202,474

The Medical Center Rail Extension is funded at 80% federal, 10% City of Memphis, and 10% TDOT.

MATA periodically receives funds from Section 5309-Bus, either through TDOT or as a direct appropriation. This program is also funded at 80%/10%/10%. In previous years, MATA has secured these funds directly for projects such as Central Station and the North End Terminal. In recent years, TDOT has lobbied for a statewide allocation through this source and divided the funds up among transit agencies in the state, generally to pay for bus purchases.

MATA's previous rail projects, The Main Street Trolley and Riverfront Loop Trolley, were funded with federal Interstate Transfer funds, a funding source that is no longer available.

With regard to operations and maintenance revenues from the federal level, MATA is currently receiving funding under the Job Access and Reverse Commute (JARC) program. These funds are primarily used to cover costs of supplemental bus service to connect people with jobs. MATA has typically used these funds to add late night and weekend service to job sites that were not well served during these time periods. Funds are distributed on a competitive basis and require a 50% non-federal match. MATA received \$1,500,000 in federal funds in the most recent funding cycle. Matching funds are provided by TDOT and the City of Memphis.

(City of Memphis Funding) The local funding partner for all types of capital and operations and maintenance costs is the City of Memphis. MATA hopes to partner with other cities and counties in the Memphis region during the plan period in order to continue implementing other rail projects that extend outside the limits of the City of Memphis. The City of Memphis is expected to continue to provide matching funds for capital costs, and a portion of the funds for operation and maintenance of the entire transit system.

The City's CIP is a multi-year plan for capital expenditures to replace and expand the City's infrastructure, vehicles and equipment. The current CIP covers the five-year period of Fiscal Year 2004 through Fiscal Year 2008. The City's overall capital budget for Fiscal Year 2004 is approximately \$160 million, of which about \$115 million is City funds and about \$45 million is from other sources, primarily federal funds.

MATA's allocation of \$8.6 million represents about 5% of the City Funds in the CIP budget for Fiscal Year 2004.

The City's overall operations and maintenance budget for Fiscal Year 2004 is approximately \$483 million. MATA received \$14 million in 2004 for operating costs, or about 3% of the City Operating budget.

(Tennessee Department of Transportation Funding) The state funding partner for all types of capital and operations and maintenance costs is TDOT. TDOT is expected to provide matching funds for capital costs and a portion of the funds for operation and maintenance of the entire transit system.

The Office of Public Transportation manages TDOT's Mass Transit budget. The state-only funds in TDOT's Fiscal Year 2003-2004 budget are \$28,188,000. TDOT's Mass Transit budget includes both operating funds and capital funds. TDOT also administers federal funds for the smaller systems in the state. The total Mass Transit budget, including these federal funds, is about \$50 million in the current fiscal year. The Mass Transit budget does not include federal funds that are granted directly to the larger local transit agencies in the state, such as MATA. TDOT provides operating assistance and a portion of the matching funds on capital grants to MATA.

Transit Capital Projected Revenues

The assumptions for funding of transit capital projects are as follows:

- **Fixed Guideways** - federal Section 5309-New Starts funding can be secured to cover 50% of the cost of most fixed guideway projects in this plan. This has been determined to be a reasonable assumption based on MATA's past success in obtaining federal funds for major fixed guideway projects. It is further assumed that local and state sources will be available to cover the non-federal share. This assumption has been determined to be reasonable based on current commitments by the City of Memphis and TDOT for studies for the Regional Rail Program and on-going efforts to solidify these same commitments for future phases of the program. Further, it has been assumed that increases in local and state funds from existing sources, can meet the capital requirements as called for in this plan.

- **Passenger Terminals** - federal Section 5307-Formula funding provided to MATA on an annual basis will provide adequate funds to implement the transit centers, park-and-ride lots and intermodal terminals included in the plan. Existing local and state sources, at 10% each, will continue to be provided to match the 80% federal share for this program.

The Arena Intermodal Transfer Facility, currently under construction, is funded with Discretionary Surface Transportation Program funds and is being developed by others at no cost to MATA. The South Intermodal Terminal is funded by a combination of Section 5307-Formula, 5309-Bus (through an allocation from TDOT), and funding from an intercity bus operator. Federal funds (80%) will be matched by the City of Memphis and TDOT. Federal discretionary Section 5309-Bus funds or other non-recurring sources may become available to help support this element of the program, but are not required to insure its implementation.

- **Other Capital Projects** - federal Section 5307-Formula funding provided to MATA on an annual basis will provide adequate funds to maintain MATA's existing and expanded vehicle fleet and infrastructure. Existing local and state sources, at 10% each, will continue to be provided to match the 80% federal share for this program.

In addition to supporting Passenger Terminal projects and Other Capital Projects, a portion of the annual Section 5307-Formula funding has also historically been used to offset costs associated with preventive maintenance of the existing fleet and provision of ADA paratransit service. The financial plan assumes that the share of Section 5307-Formula funds used to support preventive maintenance and ADA paratransit service are frozen at existing levels, i.e., funding for capital projects will remain at current levels and will not decrease in the future.

- **Federal Highway Transportation Funds (Non-Transit)** - As discussed in the revenue portion of the Non-Transit section of this chapter, there are several key federal funding sources that can be used to transit investments. In the Non-Transit revenue section, IM, NHS, and STP funds are projected to result in a positive balance of \$682,204,881 after accounting for all Non-Transit investments over the life of the plan. These funds are eligible for transit funding and are a major source of funding for the transit capital portion of this long range transportation plan.
- **Local Funds** - As discussed in the revenue portion of the Non-Transit section of this chapter, there are numerous existing local funding sources in place. Traditionally, these funds have predominately been used for Non-Transit investments. However, these funds could (and have) been used for transit investments in the past by MPO area jurisdictions. In the Non-Transit revenue section, existing local funds are projected to result in a positive balance of \$170,018,412 accounting for all Non-Transit investments over the life of the plan.

These funds are eligible for transit funding and are a major source of local funding for the transit capital and operating portion of this long range transportation plan.

Additionally, new local funding sources will have to be secured to implement the transit portion of this plan. Based on available options for securing adequate local revenues, four local funding options have been identified generating an additional \$204,100,000 in new local funds. Further details on these new local funds are discussed in detail later in this chapter.

Estimated transit revenues by horizon year are detailed for capital projects in **Table 46**.

TABLE 46
Total Memphis MPO Programmed and Projected Transit Capital Revenue 2004-2026
Long Range Transportation Plan

Capital Funding - 2006					10							
	FTA 5307 - Formula 80% (Federal)	FTA 5307 - Match 10% (State)	FTA 5307 - Match 10% (Local)	FTA 5307 (Total)	FTA 5309 New Start 50% (Federal)	FTA 5309 New Start 50% (Local)	FTA 5309 New Start (Total)	Non-Transit Sources 80% (Federal) - IM, NHS, STP	Non-Transit Sources 10% (State)	Non-Transit Sources 10% (Local)	Non-Transit Sources IM, NHS, STP (Total)	
Project	(Federal)	(State)	(Local)	(Total)								Total
Passenger Terminals and Other Capital Expenses	\$ 19,994,437	\$ 2,499,305	\$ 2,499,305	\$ 24,993,046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,993,046
Fixed Guideway - Southeast Corridor (Downtown)	\$ -	\$ -	\$ -	\$ -	\$ 52,324,159	\$ 52,324,159	\$104,648,317	\$ -	\$ -	\$ -	\$ -	\$ 104,648,317
Fixed Guideway - Southeast Corridor (remaining)	\$ -	\$ -	\$ -	\$ -	\$ 9,483,463	\$ 9,483,463	\$ 18,966,925	\$ -	\$ -	\$ -	\$ -	\$ 18,966,925
Fixed Guideway - South Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Guideway - North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Costs	\$ 19,994,437	\$ 2,499,305	\$ 2,499,305	\$ 24,993,046	\$ 61,807,621	\$ 61,807,621	\$123,615,242	\$ -	\$ -	\$ -	\$ -	\$ 148,608,288

Capital Funding - 2016												
	FTA 5307 - Formula 80% (Federal)	FTA 5307 - Match 10% (State)	FTA 5307 - Match 10% (Local)	FTA 5307 (Total)	FTA 5309 New Start 50% (Federal)	FTA 5309 New Start 50% (Local)	FTA 5309 New Start (Total)	Non-Transit Sources 80% (Federal) - IM, NHS, STP	Non-Transit Sources 10% (State)	Non-Transit Sources 10% (Local)	Non-Transit Sources IM, NHS, STP (Total)	
Project	(Federal)	(State)	(Local)	(Total)	50% (Federal)	50% (Local)	(Total)	IM, NHS, STP	(State)	(Local)	(Total)	Total
Passenger Terminals and Other Capital Expenses	\$ 66,648,120	\$ 8,331,015	\$ 8,331,015	\$ 83,310,150	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 83,310,150
Fixed Guideway - Southeast Corridor (Downtown)	\$ -	\$ -	\$ -	\$ -	\$ 77,124,746	\$ 77,124,746	\$154,249,492	\$ 93,648,768	\$ 11,706,096	\$ 11,706,096	\$117,060,960	\$ 271,310,452
Fixed Guideway - Southeast Corridor (remaining)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Guideway - South Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Guideway - North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Costs	\$ 66,648,120	\$ 8,331,015	\$ 8,331,015	\$ 83,310,150	\$ 77,124,746	\$ 77,124,746	\$154,249,492	\$ 93,648,768	\$ 11,706,096	\$ 11,706,096	\$117,060,960	\$ 354,620,602

Capital Funding - 2026												
	FTA 5307 - Formula 80% (Federal)	FTA 5307 - Match 10% (State)	FTA 5307 - Match 10% (Local)	FTA 5307 (Total)	FTA 5309 New Start 50% (Federal)	FTA 5309 New Start 50% (Local)	FTA 5309 New Start (Total)	Non-Transit Sources 80% (Federal) - IM, NHS, STP	Non-Transit Sources 10% (State)	Non-Transit Sources 10% (Local)	Non-Transit Sources IM, NHS, STP (Total)	
Project												Total
Passenger Terminals and Other Capital Expenses	\$ 66,648,120	\$ 8,331,015	\$ 8,331,015	\$ 83,310,150	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 83,310,150
Fixed Guideway - Southeast Corridor (Downtown)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Guideway - Southeast Corridor (remaining)	\$ -	\$ -	\$ -	\$ -	\$100,000,000	\$100,000,000	\$200,000,000	\$204,164,971	\$ 25,520,621	\$ 25,520,621	\$255,206,214	\$ 455,206,214
Fixed Guideway - South Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$247,064,317	\$ 30,883,040	\$ 30,883,040	\$308,830,396	\$ 308,830,396
Fixed Guideway - North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,102,817	\$ 387,852	\$ 387,852	\$ 3,878,521	\$ 3,878,521
Total Capital Costs	\$ 66,648,120	\$ 8,331,015	\$ 8,331,015	\$ 83,310,150	\$100,000,000	\$100,000,000	\$200,000,000	\$454,332,105	\$ 56,791,513	\$ 56,791,513	\$567,915,131	\$ 851,225,281

Capital Funding - Total (All Horizon Years)

Project	FTA 5307 - Formula 80% (Federal)	FTA 5307 - Match 10% (State)	FTA 5307 - Match 10% (Local)	FTA 5307 (Total)	FTA 5309 New Start 50% (Federal)	FTA 5309 New Start 50% (Local)	FTA 5309 New Start (Total)	Non-Transit Sources 80% (Federal) - IM, NHS, STP	Non-Transit Sources 10% (State)	Non-Transit Sources 10% (Local)	Non-Transit Sources IM, NHS, STP (Total)	Total
Passenger Terminals and Other Capital Expenses	\$153,290,677	\$ 19,161,335	\$ 19,161,335	\$ 191,613,346	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 191,613,346
Fixed Guideway - Southeast Corridor (Downtown)	\$ -	\$ -	\$ -	\$ -	\$129,448,905	\$129,448,905	\$258,897,809	\$ 93,648,768	\$ 11,706,096	\$ 11,706,096	\$117,060,960	\$ 375,958,769
Fixed Guideway - Southeast Corridor (remaining)	\$ -	\$ -	\$ -	\$ -	\$109,483,463	\$109,483,463	\$218,966,925	\$204,164,971	\$ 25,520,621	\$ 25,520,621	\$255,206,214	\$ 474,173,139
Fixed Guideway - South Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$247,064,317	\$ 30,883,040	\$ 30,883,040	\$308,830,396	\$ 308,830,396
Fixed Guideway - North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,102,817	\$ 387,852	\$ 387,852	\$ 3,878,521	\$ 3,878,521
Total Capital Costs	\$153,290,677	\$ 19,161,335	\$ 19,161,335	\$ 191,613,346	\$238,932,367	\$238,932,367	\$477,864,734	\$547,980,873	\$ 68,497,609	\$ 68,497,609	\$684,976,091	\$ 1,354,454,171

Source	2006	2016	2026	Total
Local - Existing - Transit	\$ 27,499,305	\$ 33,331,015	\$ 35,122,528	\$ 95,952,848
Local - Existing Non-Transit	\$ 36,807,621	\$ 36,706,096	\$ 55,958,202	\$ 129,471,919
Local - New	\$ -	\$ 27,124,746	\$ 74,041,798	\$ 101,166,544
State - Existing	\$ 2,499,305	\$ 20,037,111	\$ 65,122,528	\$ 87,658,944
Federal - FTA	\$ 81,802,058	\$ 143,772,866	\$ 166,648,120	\$ 392,223,044
Federal - Non-Transit (IM, NHS, STP)	\$ -	\$ 93,648,768	\$ 454,332,105	\$ 547,980,873
Total	\$148,608,288	\$ 354,620,602	\$ 851,225,281	\$ 1,354,454,171

Operations and Maintenance Revenue

The assumptions for funding of operating activities are as follows:

- **Existing System and Service Improvements**

The costs associated with operation and maintenance of the various services that MATA provides is estimated based on hours of service, calculated from operating parameters including frequency of service by time period during the day, and span of service by day of the week. The average cost per hour (including operations and maintenance) is then multiplied by hours to derive total operating costs on a yearly basis. Existing sources of funding at existing levels of funding will be adequate to finance this element of the plan. Federal preventive maintenance and ADA paratransit funds from the Section 5307-Formula program will continue at the current levels. Other service that is funded fully or partially by special grants (such as Job Access Reverse Commute) or private contributions will continue as long as the earmarked funding sources remain in place. It is assumed that passenger fares and other system generated revenues will continue to cover 28% of operating costs.

- **Fixed Guideways** - revenues to cover the cost of new fixed guideway lines will be provided by a combination of passenger fares and other system generated revenues, existing and new local funding sources, and existing and new state funding sources. It is assumed that passenger fares and other system-generated revenues will cover 28% of operating costs. Local and state sources will cover the remainder, at shares of 75% and 25%, respectively, which is about the same split as it is currently. Like the fixed guideway element of the capital program, it is assumed that higher levels of existing local and state sources will be adequate to support the system until the three regional lines -- Southeast (except for Downtown-Airport line), South and North -- begin implementation. At that time one or more new funding sources will be needed.

Table 47 details operation and maintenance funding by horizon year. A description of this funding follows the table.

TABLE 47
Total Memphis MPO Programmed and Projected Transit O & M Revenue
2004-2026
Long Range Transportation Plan

Operating Funding - 2006

Project	FTA Federal 5307 (Formula)	State (TDOT) Sources	Local Existing Sources	Fares and Other Sources	Total
Existing System and Service Improvements	\$ 19,440,192	\$ 16,196,934	\$ 52,950,000	\$ 37,198,257	\$ 125,785,383
Fixed Guideway - Medical Center Rail Extension	\$ -	\$ 693,588	\$ 2,080,765	\$ 1,078,915	\$ 3,853,269
Fixed Guideway - Southeast Corridor (Downtown-Airport)	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Guideway - Southeast Corridor (remainder)	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Guideway - South Corridor	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Guideway - North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Costs	\$ 19,440,192	\$ 16,890,522	\$ 55,030,765	\$ 38,277,172	\$ 129,638,652

Operating Funding - 2016

Project	FTA Federal 5307 (Formula)	State (TDOT) Existing Sources	Local Existing Sources	Fares and Other Sources	Total
Existing System and Service Improvements	\$ 64,800,640	\$ 53,989,780	\$ 176,500,000	\$ 123,994,190	\$ 419,284,610
Fixed Guideway - Medical Center Rail Extension	\$ -	\$ 2,311,961	\$ 6,935,884	\$ 3,596,384	\$ 12,844,230
Fixed Guideway - Southeast Corridor (Downtown-Airport)	\$ -	\$ 15,661,382	\$ 46,984,145	\$ 24,362,149	\$ 87,007,676
Fixed Guideway - Southeast Corridor (remainder)	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Guideway - South Corridor	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Guideway - North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Costs	\$ 64,800,640	\$ 71,963,123	\$ 230,420,029	\$ 151,952,724	\$ 519,136,516

Operating Funding - 2026

Project	FTA Federal 5307 (Formula)	State (TDOT) Existing Sources	Local Existing Sources	Fares and Other Sources	Total
Existing System and Service Improvements	\$ 64,800,640	\$ 53,989,780	\$ 176,500,000	\$ 123,994,190	\$ 419,284,610
Fixed Guideway - Medical Center Rail Extension	\$ -	\$ 2,311,961	\$ 6,935,884	\$ 3,596,384	\$ 12,844,230
Fixed Guideway - Southeast Corridor (Downtown-Airport)	\$ -	\$ 22,373,402	\$ 67,120,207	\$ 34,803,070	\$ 124,296,680
Fixed Guideway - Southeast Corridor (remainder)	\$ -	\$ -	\$ 31,327,410	\$ 12,182,882	\$ 43,510,292
Fixed Guideway - South Corridor	\$ -	\$ -	\$ 4,381,889	\$ 1,704,068	\$ 6,085,957
Fixed Guideway - North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Costs	\$ 64,800,640	\$ 78,675,144	\$ 286,265,390	\$ 176,280,595	\$ 606,021,769

Operating Funding - Total (All Horizon Years)

Project	FTA Federal 5307 (Formula)	State (TDOT) Existing Sources	Local Existing Sources	Fares and Other Sources	Total
Existing System and Service Improvements	\$ 149,041,472	\$ 124,176,494	\$ 405,950,000	\$ 285,186,637	\$ 964,354,603
Fixed Guideway - Medical Center Rail Extension	\$ -	\$ 5,317,511	\$ 15,952,534	\$ 8,271,684	\$ 29,541,729
Fixed Guideway - Southeast Corridor (Downtown-Airport)	\$ -	\$ 38,034,784	\$ 114,104,352	\$ 59,165,220	\$ 211,304,356
Fixed Guideway - Southeast Corridor (remainder)	\$ -	\$ -	\$ 31,327,410	\$ 12,182,882	\$ 43,510,292
Fixed Guideway - South Corridor	\$ -	\$ -	\$ 4,381,889	\$ 1,704,068	\$ 6,085,957
Fixed Guideway - North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Costs	\$ 149,041,472	\$ 167,528,789	\$ 571,716,185	\$ 366,510,491	\$ 1,254,796,937

Source	2006	2016	2026	Total
Local - Existing - Transit	\$ 55,030,765	\$ 230,420,029	\$ 250,556,091	\$ 536,006,886
Local - Existing Non-Transit	\$ -	\$ -	\$ 35,709,299	\$ 35,709,299
Fares and Other Sources	\$ 38,277,172	\$ 151,952,724	\$ 176,280,595	\$ 366,510,491
State - Existing	\$ 16,890,522	\$ 71,963,123	\$ 78,675,144	\$ 167,528,789
Federal - FTA	\$ 19,440,192	\$ 64,800,640	\$ 64,800,640	\$ 149,041,472
Total	\$ 129,638,652	\$ 519,136,516	\$ 606,021,768	\$ 1,254,796,937

The operations and maintenance plan is based on a strategy of modest increases in the existing transit system and introduction of light rail service in each of the fixed guideway corridors of the plan. Increases in bus service will be made to provide service to new suburban growth areas, and to realign service within the existing service area to address changing demand. Fixed guideway service will be introduced as construction is completed in each corridor. Although no formal priorities have been established after the Downtown-Airport line, the build-out scenario presented below is based on the assumption that the corridor with the highest projected ridership per mile based on MATA's Long Range Transit Plan would be built first (remainder of the Southeast Corridor), followed by the second highest (South Corridor), and lastly, the lowest (North Corridor).

Corridor	Segment	Beginning of Service
Southeast	Downtown-Airport	2010
Southeast	Remainder of corridor to Collierville	2023
South	Downtown-Southaven	2026
North	Downtown-Millington	2034

Funding for operation and maintenance costs consists of the following sources:

1. Passenger fares,
2. Other system-generated revenues,
3. Federal grants,
4. State sources of operating assistance, and
5. Local sources of operating assistance.

MATA depends upon other government entities for three of the five major sources of funding – federal, state and local. MATA has indirect control over passenger revenues and other system-generated revenues through its fare policies and other efforts to sell advertising space, and lease its facilities. The additional funding potential from fares, sales, and leases will not be adequate to cover the additional operating costs associated with service improvements recommended in the plan. Therefore, increases in funding from government entities will be required.

Fare revenues and system-generated revenues are assumed to cover 28% of operating costs – about the same percentage as it is currently.

Operating subsidies will need to be covered by state and/or local sources. State sources would likely be limited to TDOT. Higher levels of funding could be provided from an overall increase in the share of the TDOT budget that is allocated to transit statewide, or dedication of a specific revenue source (existing or new) collected at the state level for transit. At the local level, the City of Memphis would have the same basic options -- allocate a larger share of its annual operating budget to MATA, or provide a dedicated revenue source that is earmarked for MATA. Another option would be to collect

revenues from other local governments in the region, either at the county level or from individual municipalities.

For the purpose of this plan, it is assumed that the cost of service increases in bus, paratransit and downtown trolley modes can be absorbed with existing funding sources and fare revenues with no major policy changes. The additional funding needed to operate the fixed guideway projects would be shared between local sources (the City of Memphis and other jurisdictions that choose to participate) at 75% and TDOT at 25%. This is about the same funding split as existing operating subsidies from the City of Memphis and TDOT. It is further assumed that funding for Preventive Maintenance and ADA Paratransit (from Section 5307-Formula) are frozen at existing levels, i.e., no additional Section 5307-Formula funds will be used to cover costs associated with expanded services.

3. Costs Versus Revenue Analysis

Funding support for the transit plan will take the form of increased financial commitments from the City of Memphis, other local governments in the Memphis region, and/or the State of Tennessee. These financial commitments should generate enough revenue to support on-going operations as well as allow future expansion of the fixed guideway system with federal funding at about 50% of capital costs. Ideally, the added funding would be in the form of one or more dedicated funding sources that are earmarked for transit use. The local dedicated funding source could be provided directly to MATA or reserved by a government agency and made available to MATA.

The *Tennessee Twenty-Five Year Transit Plan*, conducted by the TDOT in 2003 identified the following possible sources for additional funding for transit, either at the state level or the local level:

Potential State Sources

- Gasoline Tax
- Non-Gas Motor Fuel Tax
- Motor Fuel Sales
- Vehicle License Fee/Emissions Fee
- Vehicle Excise Tax/Personal Property Tax
- Single Article Sales Tax

Potential Local Sources

- General Sales Tax
- Wheel Tax/Vehicle License Tax
- Vehicle Excise Tax/Personal Property Tax
- Motor Fuel Tax
- Motor Fuel Sales Tax

Of these potential sources, four funding sources have been identified as offering the greatest likelihood of funds for transit investments in the MPO area and for that reason are part of the transit funding plan.

The following is discussion and analysis of these preferred revenue sources. For purposes of this plan, revenue forecasts in this section were only derived for Shelby County to demonstrate that reasonable funding is available for transit investments as contained in the fiscally constrained portion of this plan.

General Sales Tax -

Local option sales taxes can be levied at the local level with voter approval, capped at a maximum rate of 2.75%. Currently Shelby County levies 2.25%, which could be increased by an additional 0.50%

Based on the recently completed *Tennessee Twenty-Five Year Transit Plan*, if Shelby County levied an additional 0.1% as part of its local option sales tax \$75.9 million in additional revenue could be generated over twenty five years in Shelby County.

Wheel Tax/Vehicle License Fee –

State law allows counties to levy an annual vehicle fee, referred to as the wheel tax, with voter approval, or a 2/3 vote of the county governing board. The wheel tax is a flat fee paid as part of the annual vehicle licensing and registration process. Counties may designate the proceeds from the wheel tax to transportation purposes.

Based on the recently completed *Tennessee Twenty-Five Year Transit Plan*, if Shelby County levied an additional \$10 per vehicle \$41.5 million in additional revenue could be generated over twenty-five years in Shelby County.

Vehicle Excise/Personal Property Tax –

Cities, counties, and special school districts in Tennessee can levy Local property taxes. Across Tennessee, property tax rates for 2002 ranged from a low of \$.081 per \$100 of assessed value to \$3.94 per \$100 of assessed value.

Based on the recently completed *Tennessee Twenty-Five Year Transit Plan*, if Shelby County levied an additional 0.1% increase \$57.9 million in additional revenue could be generated over twenty five years in Shelby County.

Motor Fuel Tax (All Types) –

There are several motor fuels that the state levies in Tennessee. These fuels include gasoline, diesel motor fuel, petroleum, and natural gas. A local option gas tax is currently authorized at \$0.01 per gallon with local voter approval.

Based on the recently completed *Tennessee Twenty-Five Year Transit Plan*, if

Shelby County levied an additional \$0.01 per gallon \$28.8 million in additional revenue could be generated over twenty-five years in Shelby County.

If all four local funding options were pursued, \$204,100,000 in additional local revenues could be generated for the proposed transit investments in this plan. Additionally, the financial element for Non-Transit financial plan provides \$682,204,881 in un-budgeted Interstate Maintenance (IM) funds, National Highway System (NHS) funds, and Surface Transportation Program (STP) funds (non-transit funds). The combination of these new/flexed transit resources demonstrates fiscal constraint of the transit investments in the Rail Alternative with the exception of the North rail corridor.

A summary of costs and funding sources for all elements of the plan are presented in **Table 48**. MATA has received strong support from the City of Memphis and State of Tennessee in recent years, both in terms of the capital funding and operating funding. In terms of capital, both entities have provided funds every year for decades to match MATA's formula grants and, in addition, have provided matching funds for major capital projects such as the Main Street Trolley, Riverfront Loop Trolley, Medical Center Rail Extension, Central Station, and North End Terminal. Further, study funds for the Downtown-Airport Corridor have been provided at a level of 25% each.

As transit investments move forward the MPO and MATA will work to secure the additional increases in funding. By the time major investments for fixed guideways reach the construction stage, institutional arrangements will have to be in place to allow MATA to continue expanding its fixed guideway system as well as operate its bus, paratransit, and rail system at levels adequate to meet transit demand in the region.

Table 48
TRANSIT CAPITAL AND O & M COSTS VERSUS REVENUES BY HORIZON YEAR
LONG RANGE TRANSPORTATION PLAN

<u>TRANSIT</u> Project	2006			2016			2026			2004-2026 Non-Transit Plan Summary		
	Cost	Revenue	Balance	Cost	Revenue	Balance	Cost	Revenue	Balance	Cost	Revenue	Balance
Capital												
Passenger Terminals and Other Capital Expenses	\$ 24,993,046	\$ 24,993,046	\$ -	\$ 83,310,150	\$ 83,310,150	\$ -	\$ 83,310,150	\$ 83,310,150	\$ -	\$ 191,613,346	\$ 191,613,346	\$ -
Fixed Guideway-Southeast Corridor (Downtown-Airport)	\$ 104,648,317	\$ 104,648,317	\$ -	\$ 271,310,452	\$ 271,310,452	\$ -	\$ -	\$ -	\$ -	\$ 375,958,769	\$ 375,958,769	\$ -
Fixed Guideway-Southeast Corridor (remainder)	\$ 18,966,925	\$ 18,966,925	\$ -	\$ -	\$ -	\$ -	\$ 455,206,214	\$ 455,206,214	\$ -	\$ 474,173,139	\$ 474,173,139	\$ -
Fixed Guideway-South Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 308,830,396	\$ 308,830,396	\$ -	\$ 308,830,396	\$ 308,830,396	\$ -
Fixed Guideway-North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,878,521	\$ 3,878,521	\$ -	\$ 3,878,521	\$ 3,878,521	\$ -
TOTAL	\$ 148,608,288	\$ 148,608,288	\$ -	\$ 354,620,602	\$ 354,620,602	\$ -	\$ 851,225,281	\$ 851,225,281	\$ -	\$1,354,454,171	\$1,354,454,171	\$ -
O & M												
Existing System and Service Improvements	\$ 125,785,383	\$ 125,785,383	\$ -	\$ 419,284,610	\$ 419,284,610	\$ -	\$ 419,284,610	\$ 419,284,610	\$ -	\$ 964,354,603	\$ 964,354,603	\$ -
Medical Center Extension	\$ 3,853,269	\$ 3,853,269	\$ -	\$ 12,844,230	\$ 12,844,230	\$ -	\$ 12,844,230	\$ 12,844,230	\$ -	\$ 29,541,729	\$ 29,541,729	\$ -
Fixed Guideway-Southeast Corridor (Downtown-Airport)	\$ -	\$ -	\$ -	\$ 87,007,676	\$ 87,007,676	\$ -	\$ 124,296,680	\$ 124,296,680	\$ -	\$ 211,304,356	\$ 211,304,356	\$ -
Fixed Guideway-Southeast Corridor (remainder)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,510,292	\$ 43,510,292	\$ -	\$ 43,510,292	\$ 43,510,292	\$ -
Fixed Guideway-South Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,085,957	\$ 6,085,957	\$ -	\$ 6,085,957	\$ 6,085,957	\$ -
Fixed Guideway-North Corridor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL	\$ 129,638,652	\$ 129,638,652	\$ -	\$ 519,136,516	\$ 519,136,516	\$ -	\$ 606,021,769	\$ 606,021,769	\$ -	\$1,254,796,937	\$1,254,796,937	\$ -
TOTAL TRANSIT SYSTEM	\$ 556,493,880	\$ 556,493,880	\$ -	\$1,747,514,236	\$1,747,514,236	\$ -	\$2,914,494,100	\$2,914,494,100	\$ -	\$5,218,502,216	\$5,218,502,216	\$ -

C. Demonstration of Fiscal Constraint

As federal regulations dictate, this chapter has provided “a financial plan that demonstrates the consistency of proposed transportation investments with already available and projected sources of revenue.” Costs and revenues were projected by source for both the non-transit and transit aspects of this LRTP. The non-transit cost versus revenue analysis showed that existing and projected revenues will cover the vast majority of forecasted capital and operations and maintenance costs, however, increased existing or dedicated funding will be necessary in the later portion of the planning horizon.

Table 49 illustrates that the North Rail Corridor can not be fully funded during the long range plan horizon. For that reason, the North Corridor has been placed on the illustrative list "wish list" for consideration when funding becomes available.

Table 49
Fiscally Constrained 2026 Transportation Plan

<i>Transportation Revenue</i>		Fiscally Unconstrained	Fiscally Constrained
Non-Transit			
State of Tennessee Prog	\$	2,696,770,000	\$ 2,696,770,000
State of Mississippi Prog	\$	569,396,958	\$ 569,396,958
MPO Prog	\$	540,008,936	\$ 540,008,936
Locally Prog	\$	2,304,532,229	\$ 2,304,532,229
Transit			
Federal	\$	541,274,516	\$ 541,264,516
State	\$	255,187,733	\$ 255,187,733
Local	\$	998,470,225	\$ 998,470,225
New			
Local	\$	204,100,000	\$ 204,100,000
Subtotal	\$	8,109,740,597	\$ 8,109,730,597
Transportation Expenditures			
Non-Transit Capital	\$	3,544,284,603	\$ 3,544,284,603
Non-Transit O & M	\$	1,446,578,350	\$ 1,446,578,350
Transit Capital	\$	1,738,427,785	\$ 1,354,454,171
Transit O & M	\$	1,483,506,749	\$ 1,254,796,937
Subtotal	\$	8,212,797,487	\$ 7,600,114,061
BALANCE	\$	(103,056,890)	\$ 509,616,536

As illustrated in **Table 49**, with the exception of the North Corridor, the plan projects contained in **Appendix N**, 2004-2026 Fiscally Constrained Plan-All Projects (by funding type), are fiscally constrained with a reserve balance of \$509,616,536 in available funds.